

Annual Administrative Code Supplement
2002 Edition

DEPARTMENT OF NATURAL RESOURCES
LAW ENFORCEMENT DIVISION
WHOLESALE FISH DEALERS REPORT FORMS #9165

R 308.1
Source: 1987 AACS.

LOCAL HUNTING AND FIREARMS CONTROLS

R 317.101.1
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MACKINAC ISLAND STATE PARK COMMISSION

GENERAL RULES

PART 1. DEFINITIONS

R 318.111 Definitions.

Rule 1. As used in these rules:

"Carrying passengers for hire" means the acts of any person transporting passengers to any point or points on the road or roads for a specified monetary consideration or acts of accepting gratuities for transporting passengers to any point or points on the road or roads.

"Commercial operations" means any activity that involves, directly or indirectly, the buying or selling of goods or services, or the exchange or attempt or offer to exchange goods or services for money, barter, by accepting gratuities, or for anything of value.

"Commission" means the Mackinac Island state park commission.

"Director" means the director of the Mackinac Island state park commission.

"Drays" means any horse-drawn vehicle used for the transportation of property, goods, or merchandise, either belonging to the owner of the dray or to others, with or without charge, whether the charge is a single fee or is established by contract.

"Drive yourself carriage" means any horse-drawn vehicle for hire that is rented to another person or persons without the services of a driver being employed, engaged, provided, or suggested by the owner or operator of the carriage.

"Fort Mackinac bus" means any horse-drawn vehicle used for the transportation of passengers only from the downtown area directly to Fort Mackinac and return.

"Hotel bus" means a horse-drawn vehicle which is licensed to a specific hotel, which operates over the roads of the Mackinac Island state park, and which does all of the following:

Carries hotel passengers or their guests for a charge as approved by the Mackinac Island state park commission.

Operates on a fixed route or routes as designated by the Mackinac Island state park commission.

Makes infrequent deviations from the designated route or routes for the convenience of hotel guests or their party.

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(i) "Livery carriage" means any horse-drawn vehicle for hire transporting passengers for scenic drives charging on a time basis; that is, by the hour or fractions or multiples thereof, and not at a fixed price per passenger.

(j) "Motor vehicle" means any device that is self-propelled, or partially self-propelled, by which a person or property may be transported or drawn.

"Person" means an individual, partnership, corporation, association, governmental entity, or other legal entity.

"Road" means any thoroughfare, roadway, riding trail, or driving trail that is situated on lands that are under the jurisdiction of the commission.

"Saddle horse" means a riding horse furnished to a visitor or resident, for a period of time less than 1 week, for use in Mackinac Island State Park at a rental fee, whether that fee is separately identified or included in other charges, such as room rentals, either explicitly or implicitly.

"Sight-seeing carriage" means any horse-drawn vehicle that carries passengers for hire over prescribed routes established by the commission.

"Snowmobile" means a motor-driven vehicle designed for travel primarily on snow or ice of a type that utilizes sled-type runners or skis, or an endless belt tread, or any combination of these or other similar means of contact with the surface upon which it is operated. It is not a vehicle that must be registered under 1949 PA 300, MCL 257.1 to 257.923.

"State license identification plate" means a metallic plate issued by the commission that bears the license type, the year for which the plate is valid, a unique number, and any other information as determined by the commission.

"Taxicab" means any horse-drawn vehicle carrying passengers for hire from one point on the island to another.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; 2002 MR 13, Eff. Jul 19, 2002.

R 318.112 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.113 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.114 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.115 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.116 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.117 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.118 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.119 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.119a Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.119b

Source: 1997 AACS.

R 318.119c Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

R 318.119d Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

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R 318.120 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul 19, 2002.

PART 2. REGULATIONS

R 318.121 License fee required.

Rule 21. A person shall not operate any horse-drawn vehicle carrying passengers for hire over any roads until the person has been granted a license by the commission or its agent in writing and has paid the annual fee as determined by the commission.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.122 Temporary permits.

Rule 22. (1) A person shall not operate a motor vehicle within the Mackinac Island state park without a temporary permit. The commission, or its duly authorized agent, shall issue a temporary permit for the operation of motor vehicles for such emergency or public and private work as the commission shall prescribe and approve. An application for a temporary permit shall be submitted in writing to the commission or its duly authorized agent and shall set forth fully the reasons for the request and the period of the permit. The commission has authority to require property damage and public liability insurance of any applicant in an amount sufficient, in its judgment, for adequate protection of persons and property. The director shall keep a written record of all permits issued, and the commission reserves the right to revoke any permit so issued at any time, giving notice in writing to the permit holder and setting forth the reasons for the revocation.

(2) The state of Michigan or any political subdivision thereof may be permitted to operate its emergency and utility vehicles over the Mackinac Island state park roads in the normal performance of its governmental functions.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1954 ACS 24, Eff. Nov. 12, 1960; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.122a Hotel bus license.

Rule 22a. Any hotel operating on Mackinac Island may apply for and be granted a license to operate a hotel bus after the payment of a fee if the commission determines both of the following:

(a) That the application is made by the hotel owner and the bus is to be operated for the convenience of hotel guests and those accompanying them.

(b) That the location of the hotel is such that it is necessary to provide transportation for guests to and from the docks.

History: 1954 ACS 33, Eff. Feb. 14, 1963; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.122b Dray license.

Rule 22b. Any person operating a dray within the Mackinac Island state park shall have a license issued by the commission. The commission may establish the rate for dray services.

History: 1954 ACS 33, Eff. Feb. 14, 1963; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.123 Applications for licenses.

Rule 23. An application for a license to operate a horse-drawn vehicle for hire or saddle horse for hire shall be made to the commission in writing.

History: 1954 ACS 33, Eff. Feb. 14, 1963; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.124 Identification plates.

Rule 24. A person shall not operate a horse-drawn vehicle for hire unless the person's carriage or carriages are equipped with a "state license identification plate" which shall be furnished by the commission and which shall continue to be the property of the state of Michigan.

History: 1954 ACS 33, Eff. Feb. 14, 1963; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.126 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul. 19, 2002.

R 318.127 Violation of rules.

Rule 27. Any person violating any of these rules or other conditions of a license may have his or her license revoked or suspended.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

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R 318.129 Nontransferability of state license.

Rule 29. The "state license identification plate" issued by the commission shall be securely and conspicuously attached to each vehicle without visible obstruction and shall not be transferred to any other vehicle, except with consent of the commission or its authorized agent.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.133 Conduct of licensee's employees.

Rule 33. Any person licensed to operate vehicles under these rules is responsible for the conduct of the person's employees.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.134 Agreements with licensees.

Rule 34. The commission shall annually enter into agreements with licensees for the purpose of prescribing conditions of operation.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.135 Rescinded.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC; rescinded 2002 MR 13, Eff. Jul. 19, 2002.

R 318.136 Number of carriage licenses.

Rule 36. On or before June 1 of each year, the commission shall issue the number of licenses for horse-drawn vehicles carrying passengers for hire that in its judgment will adequately serve the public, but not more than the following maximum numbers:

- (a) Sight-seeing carriages..... 55 licenses.
- (b) Taxicabs..... 17 licenses.
- (c) Drive-yourself carriages..... 18 licenses.
- (d) Livery carriages..... 21 licenses.

History: 1954 ACS 24, Eff. Nov. 12, 1960; 1954 ACS 77, Eff. Dec. 13, 1973; 1979 AC; 1979 ACS 6, Eff. May 20, 1981; 1979 ACS 11, Eff. July 27, 1982; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.141 Scope; "proper permission" defined.

Rule 41. (1) These rules govern the use of and occupancy of the Mackinac Island state park, the Historic Mill Creek state park, and the Michilimackinac state park.

(2) "Proper permission," as used in R 318.142 to R 318.145, means a written permit or license authorized by the commission and issued by its director or authorized representative.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.142 Signs, fences, improvements, and posted lands.

Rule 42. (1) It is unlawful to do any of the following on state-owned lands without proper permission:

Post, place, or erect signs.

Place or distribute advertising material.

Erect a fence or barrier.

Construct or occupy improvements.

Enclose state-owned lands.

(2) It is unlawful to move, remove, destroy, mutilate, or deface posters, notices, signs, or markers of the commission or of any other agency of government.

(3) It is unlawful to enter, use, or occupy park lands for any purpose when they are posted against such entry, use, or occupancy, as ordered by the commission.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.143 Camping and hunting.

Rule 43. (1) A person shall not camp within the Mackinac Island state park, Historic Mill Creek state park, or Michilimackinac state park.

(2) A person shall not hunt in Mackinac Island state park or Michilimackinac state park.

(3) A person shall not do any of the following without proper permission:

Carry or possess a firearm unless unloaded in both barrel and magazine.

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Shoot an air rifle, air pistol, paintball-emitting device of any kind, or slingshot.

Shoot a bow and arrow or crossbow.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.144 Refuse and fires.

Rule 44. (1) A person shall not use park lands or facilities as a place to keep or dispose of refuse, rubbish, trash, garbage, or other litter. This does not apply to refuse or garbage resulting from legal uses of park lands, which shall be placed in proper receptacles.

(2) A person shall not build fires except in designated places or in stoves or grills as approved by an authorized representative of the commission.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.145 Vehicles and animals.

Rule 45. (1) A person shall not operate a motor vehicle in other than an area or road clearly designated for the parking or operation of motor vehicles without proper permission.

(2) A person shall not ride or lead a horse, other riding animal, or pack animal on, or to allow such animal or any animal-drawn vehicle to use or travel on, any areas deemed unsafe for such use by order of the commission and posted against such use.

(3) A person shall not possess a dog unless it is under immediate control, or have a dog within any area used as a bathing beach. Any dog found not in the possession or under the immediate control of its owner or the owner's agent, or any dog found creating a nuisance or disturbance, may be removed from the park or placed under restraint.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS 77, Eff. Dec. 13, 1973; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.145a

Source: 1997 AACS.

R 318.145b Saddle horse licenses.

Rule 45b. (1) The commission, upon receipt of proper application, may issue annual licenses for a number of saddle horses for use in Mackinac Island state park as the commission determines are needed in the interest of public safety and proper service to the public.

(2) Licenses are nontransferable and shall be surrendered to the issuing authority upon demand if any transfer is attempted or if ownership of the licensed business or its location is changed or altered in any way.

(3) The commission shall establish the license fees, terms, and conditions, including the maximum rates per hour charged, under which saddle horses may be supplied for use in the state park.

History: 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.146 Miscellaneous unlawful acts.

Rule 46. On lands under the jurisdiction of the commission, it is unlawful for a person or persons to do any of the following:

(a) Use the lands for commercial operations without proper permission. In considering whether or not permission shall be granted, all of the following factors shall be considered:

(i) Interference with the safety, health, and welfare of the public.

(ii) Need for the service.

(iii) Whether the service is a duplication of available services.

(b) Use a loudspeaker or public address system without proper permission. Permission shall not be granted if the system is capable of interfering with horse-drawn traffic by having the effect of frightening horses, thereby endangering the safety of passengers in the vehicles, pedestrians, bicycle riders, and others.

(c) Change clothing in a toilet buildings or motor vehicles.

(d) Store or leave a boat, fish shanty, camping equipment, or other property without proper permission.

(e) Enter those buildings or areas to which an admission fee is established without payment of the fee, or without permission given by the commission, a commissioner, the director, or deputy director under order of the commission. Permission normally is to be given only to persons on business with the commission, any member of the commission, or any duly authorized staff member.

(f) For any lessee, licensee, or concessionaire to use, construct, or occupy any building within the park which is not furnished with an approved dry chemical fire extinguisher.

(g) For any lessee, licensee, or concessionaire to exercise his or her privileges within the park without procuring and keeping

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in effect such public liability and property damage insurance as the commission may deem adequate.

(h) For any person to furnish a saddle horse to another person for use in the Mackinac Island state park, unless a current license has been issued by the commission for the use of the saddle horse in the Mackinac Island state park.

(i) Engage in any violent, abusive, loud, boisterous, wanton, obscene, or otherwise disorderly conduct creating a breach of the peace; loiter, sit, or lie upon walks, passages, steps, or porches thereby obstructing the free passage of others; or remove, damage, or steal the property of another.

(j) Hold or participate in any type of road race or speed contest without proper permission.

(k) Conduct excavations, diggings, or surveys without proper permission.

(l) Carry or possess a metal detector without proper permission.

(m) Remove any archeological materials or artifacts without proper permission.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; 1988 MR 1, Eff. Feb. 17, 1988; 1988 MR 6, Eff. June 30, 1988; 2002 MR 13, Eff. Jul. 19, 2002.

R 318.147 Rescinded.

History: 1954 ACS 59, Eff. Aug. 14, 1969; 1954 ACS 99, Eff. May 22, 1979; 1979 AC; rescinded 2002 Mr 13, Eff. Jul. 19, 2002.

NATURAL RESOURCES COMMISSION
RECREATION BOND PROGRAM

R 318.201

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R 318.202

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R 318.203

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R 318.204

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R 318.211

Source: 1989 AACS.

WILDERNESS AND NATURAL AREAS

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R 322.3.1
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DEPARTMENT OF ENVIRONMENTAL QUALITY
LAND AND WATER MANAGEMENT
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R 322.1002
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R 322.1018
Source: 1982 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

SURFACE WATER QUALITY DIVISION

GENERAL RULES

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R 323.4
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R 323.9
Source: 2001 AACS.

DEPARTMENT OF NATURAL RESOURCES

NATURAL RESOURCES COMMISSION

STATE REVOLVING LOAN FUND

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Source: 1989 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER RESOURCES PROTECTION

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R 323.1003

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PART 2. ORGANIZATION, OPERATIONS, PROCEDURES, AND HEARINGS

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R 323.1038
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PART 5. SPILLAGE OF OIL AND POLLUTING MATERIALS

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R 323.1156
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R 323.1157
Source: 2001 AACS.

R 323.1158
Source: 2001 AACS.

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PART 9. WASTEWATER REPORTING

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PART 11. CONSTRUCTION GRANTS FOR WASTEWATER TREATMENT WORKS

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Source: 1998-2000 AACS.

R 323.1287
Source: 1998-2000 AACS.

R 323.1288
Source: 1998-2000 AACS.

PART 13. FLOODPLAINS AND FLOODWAYS

R 323.1311
Source: 1996 AACS.

R 323.1312
Source: 1996 AACS.

R 323.1313
Source: 1984 AACS.

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R 323.1314
Source: 1998-2000 AACS.

R 323.1315
Source: 1998-2000 AACS.

R 323.1316
Source: 1996 AACS.

R 323.1329
Source: 1996 AACS.

PART 17. SOIL EROSION AND SEDIMENTATION CONTROL

R 323.1701
Source: 1998-2000 AACS.

R 323.1702
Source: 1998-2000 AACS.

R 323.1703
Source: 1998-2000 AACS.

R 323.1704
Source: 1998-2000 AACS.

R 323.1705
Source: 1998-2000 AACS.

R 323.1706
Source: 1998-2000 AACS.

R 323.1707
Source: 1998-2000 AACS.

R 323.1708
Source: 1998-2000 AACS.

R 323.1709
Source: 1998-2000 AACS.

R 323.1710
Source: 1998-2000 AACS.

R 323.1711
Source: 1998-2000 AACS.

R 323.1712
Source: 1998-2000 AACS.

R 323.1713
Source: 1998-2000 AACS.

R 323.1714
Source: 1998-2000 AACS.

PART 21. WASTEWATER DISCHARGE PERMITS

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R 323.2102
Source: 1992 AACS.

R 323.2103
Source: 1992 AACS.

R 323.2104
Source: 1992 AACS.

R 323.2109
Source: 1992 AACS.

R 323.2159
Source: 1985 AACS.

R 323.2161
Source: 1992 AACS.

R 323.2162
Source: 1997 AACS.

R 323.2163
Source: 1997 AACS.

R 323.2164
Source: 1997 AACS.

R 323.2165
Source: 1997 AACS.

R 323.2166
Source: 1997 AACS.

R 323.2167
Source: 1997 AACS.

R 323.2168
Source: 1997 AACS.

R 323.2169
Source: 1997 AACS.

R 323.2170
Source: 1997 AACS.

R 323.2172
Source: 1997 AACS.

R 323.2173
Source: 1997 AACS.

R 323.2174
Source: 1997 AACS.

R 323.2175
Source: 1997 AACS.

R 323.2176
Source: 1997 AACS.

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R 323.2177
Source: 1997 AACS.

R 323.2178
Source: 1997 AACS.

R 323.2179
Source: 1997 AACS.

R 323.2180
Source: 1997 AACS.

R 323.2181
Source: 1997 AACS.

R 323.2182
Source: 1997 AACS.

R 323.2183
Source: 1997 AACS.

R 323.2184
Source: 1997 AACS.

R 323.2185
Source: 1997 AACS.

R 323.2186
Source: 1997 AACS.

R 323.2189
Source: 1995 AACS.

R 323.2190
Source: 1992 AACS.

R 323.2191
Source: 1992 AACS.

R 323.2192
Source: 1992 AACS.

R 323.2193
Source: 1998-2000 AACS.

R 323.2194
Source: 1998-2000 AACS.

R 323.2195
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PART 22. GROUNDWATER QUALITY

R 323.2201
Source: 1998-2000 AACS.

R 323.2202

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Source: 1998-2000 AACs.

R 323.2203

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R 323.2204

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R 323.2205

Source: 1998-2000 AACs.

R 323.2206

Source: 1998-2000 AACs.

R 323.2207

Source: 1998-2000 AACs.

R 323.2208

Source: 1998-2000 AACs.

R 323.2209

Source: 1998-2000 AACs.

R 323.2210

Source: 1998-2000 AACs.

R 323.2211

Source: 1998-2000 AACs.

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Source: 1998-2000 AACs.

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Source: 1998-2000 AACs.

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Source: 1998-2000 AACs.

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Source: 1998-2000 AACs.

R 323.2218

Source: 1998-2000 AACs.

R 323.2219

Source: 1998-2000 AACs.

R 323.2220

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R 323.2221

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R 323.2222
Source: 1998-2000 AACS.

R 323.2223
Source: 1998-2000 AACS.

R 323.2224
Source: 1998-2000 AACS.

R 323.2225
Source: 1998-2000 AACS.

R 323.2226
Source: 1998-2000 AACS.

R 323.2227
Source: 1998-2000 AACS.

R 323.2229
Source: 1998-2000 AACS.

R 323.2230
Source: 1998-2000 AACS.

R 323.2231
Source: 1998-2000 AACS.

R 323.2232
Source: 1998-2000 AACS.

R 323.2233
Source: 1998-2000 AACS.

R 323.2234
Source: 1998-2000 AACS.

R 323.2235
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R 323.2237
Source: 1998-2000 AACS.

R 323.2238
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R 323.2240
Source: 1998-2000 AACS.

PART 23. PRETREATMENT

R 323.2301
Source: 1995 AACS.

R 323.2302
Source: 1995 AACS.

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Source: 1995 AACS.

R 323.2304

Source: 1995 AACS.

R 323.2305

Source: 1995 AACS.

R 323.2306

Source: 1995 AACS.

R 323.2307

Source: 1995 AACS.

R 323.2308

Source: 1995 AACS.

R 323.2309

Source: 1995 AACS.

R 323.2310

Source: 1995 AACS.

R 323.2311

Source: 1995 AACS.

R 323.2312

Source: 1995 AACS.

R 323.2313

Source: 1995 AACS.

R 323.2314

Source: 1995 AACS.

R 323.2315

Source: 1995 AACS.

R 323.2316

Source: 1995 AACS.

R 323.2317

Source: 1995 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

SURFACE WATER QUALITY DIVISION

WATER RESOURCES PROTECTION

PART 24. LAND APPLICATION OF BIOSOLIDS

R 323.2401

Source: 1998-2000 AACS.

R 323.2402

Source: 1998-2000 AACS.

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R 323.2403
Source: 1998-2000 AACS.

R 323.2404
Source: 1998-2000 AACS.

R 323.2405
Source: 1998-2000 AACS.

R 323.2406
Source: 1998-2000 AACS.

R 323.2407
Source: 1998-2000 AACS.

R 323.2408
Source: 1998-2000 AACS.

R 323.2409
Source: 1998-2000 AACS.

R 323.2410
Source: 1998-2000 AACS.

R 323.2411
Source: 1998-2000 AACS.

R 323.2412
Source: 1998-2000 AACS.

R 323.2413
Source: 1998-2000 AACS.

R 323.2414
Source: 1998-2000 AACS.

R 323.2415
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Source: 1998-2000 AACS.

SURFACE WATER QUALITY DIVISION

WATER RESOURCES PROTECTION

PART 30. WATER QUALITY TRADING

R 323.3001 Definitions.

Rule 1. As used in this part:

(a) “Act” means part 31, water resources protection, 1994 PA 451, MCL 324.3101 et seq.

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- (b) "Administrator" means the administrator of the United States environmental protection agency.
- (c) "Applicable requirement" means any of the following:
- (i) A standard of performance, management practice, effluent limitation, total maximum daily load, recordkeeping, monitoring, or reporting requirement established by the clean water act, 40 C.F.R. §25 (2000), 40 C.F.R. §117 (2000), 40 C.F.R. §121 (2000), 40 C.F.R. §122 (2000), 40 C.F.R. §123 (2000), 40 C.F.R. §124 (2000), 40 C.F.R. §125 (2000), 40 C.F.R. §129 (2000), 40 C.F.R. §130 (2000), 40 C.F.R. §131 (2000), 40 C.F.R. §132 (2000), 40 C.F.R. §133 (2000), 40 C.F.R. §135 (2000), 40 C.F.R. §136 (2000), 40 C.F.R. §140 (2000), 40 C.F.R. subchapter n (2000), 40 C.F.R. 471 (2000), 40 C.F.R. subchapter o (2000) or part 31, water resources protection, 1994 PA 451, MCL 324.3101 et seq. and rules promulgated under the act.
 - (ii) A national permit issued or order entered by the department.
 - (iii) A consent judgement entered in, or an order issued by, a court of competent jurisdiction.
 - (iv) A watershed management plan approved by the department pursuant to this part.
 - (v) A plan developed and funded under a grant administered by the department under section 319 of the clean water act.
- (d) "Attainment area" means a waterbody, a receiving water, or watershed where water quality standards are being met.
- (e) "Banked credits" means credits for total phosphorus and total nitrogen that are generated and that have been registered prior to the time period during which they are used or traded under this part.
- (f) "Baseline" means the pollutant-specific point source discharge or nonpoint source loading level below which reductions must be made to generate a credit.
- (g) "Best management practices" means structural, vegetative, or managerial practices that reduce or prevent the detachment, transport, and delivery of point and nonpoint source pollutants to the surface waters.
- (h) "Calendar year" means the time period from January 1 until December 31 inclusive for a given year.
- (i) "Cap" means the combined total allowable pollutant-specific point source discharges and nonpoint source loadings established by a total maximum daily load or specified in a watershed management plan which has been approved under this part.
- (j) "Clean water act" means the federal water pollution control act, commonly referred to as the clean water act, Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-1171, and Public Law 100-4, 33 U.S.C. §1251 et seq.
- (k) "Closed trading" means the exchange of credits among or between point and nonpoint sources in a watershed or receiving water for which a pollutant-specific cap and allocations have been established to achieve or maintain a water quality standard or to implement a watershed management plan approved under this part.
- (l) "Contemporaneous" means that the generation of credits occurs during the same day, week, month, season, calendar year, or other specified time period during which the credits are used to comply with an applicable requirement.
- (m) "Credit" means the pollutant-specific point source discharge reduction or nonpoint source load reduction, minus the water quality contribution, that is generated and entered into the water quality trading registry and which may be used or traded under this part.
- (n) "Cross-pollutant trading" means the use of discharge or load reductions generated for one pollutant to be used to compensate for an increase in the discharge or loading of a different pollutant.
- (o) "Department" means the Michigan Department of environmental quality.
- (p) "Directionality" means an upstream discharge or load reduction to compensate for a downstream use of credits.
- (q) "Director" means the director of the department.
- (r) "Discharge reduction" means the difference between the baseline and the reduced discharge level that constitutes the surplus pollutant-specific reduction generated by a point source.
- (s) "Discount factor" means a trading ratio different than 1:1 that is applied to different sources or different pollutants to provide equivalency or address uncertainty.
- (t) "Intra-plant trading" means the generation and use of credits between multiple outfalls discharging into the same receiving water from a single facility that has been issued a national permit.
- (u) "Lakewide management plan" means a plan developed and implemented to address critical pollutants pursuant to the Great lakes water quality agreement of 1978, as amended.
- (v) "Load allocation" means the portion of a receiving water's loading capacity that is attributed to a nonpoint source or group of nonpoint sources under a total daily maximum load or a watershed management plan approved under this part.
- (w) "Loading capacity" means the greatest amount of pollutant loading that a receiving water can receive without violating water quality standards.
- (x) "Load reduction" means the difference between the baseline and the reduced loading level that constitutes the surplus pollutant-specific reduction generated by a nonpoint source.
- (y) "National permit" means a national pollutant discharge elimination system permit, or equivalent document or requirements, issued by the department to a discharger pursuant to part 31, water resources protection, 1994 PA 451,

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MCL 324.3101 et seq. for discharges into surface waters, and "permitted" refers to this permit.

(z) "Nonpoint source" means a source of pollutant loading to the surface waters of the state other than a source defined as a point source.

(aa) "Nutrient trading" means the generation and use of total phosphorus or total nitrogen credits among and between point and nonpoint sources.

(bb) "Open trading" means the exchange of credits among or between point and nonpoint sources in a watershed or receiving water for which a total maximum daily load or a pollutant-specific cap and allocations have not been established by an applicable requirement.

(cc) "Person" means an individual, partnership, association, corporation, industry, municipality, state agency, or interstate body.

(dd) "Point source" means a discharge that is released to the surface waters of the state by a discernible, confined, and discrete conveyance, including any of the following from which wastewater is or may be discharged:

(i) A pipe.

(ii) A ditch.

(iii) A channel.

(iv) A tunnel.

(v) A conduit.

(vi) A well.

(vii) A discrete fissure.

(viii) A container.

(ix) A concentrated animal feeding operation.

(x) A vessel or other floating craft.

(ee) "Pollution prevention" means source reduction and environmentally sound on-site or off-site reuse or recycling. Pollution prevention includes equipment or technology modifications, substitution of raw materials, process or procedure modifications and improvements in housekeeping, maintenance, or inventory control. Pollution prevention does not include a practice applied after a waste or wastewater has been generated and does not promote, include, or require incineration. Waste treatment, control, management, or disposal are not considered pollution prevention.

(ff) "Quantifiable" means that the amount, rate, and characteristics of a discharge reduction or increase can be determined or measured through an accurate, reliable, and replicable method, procedure, or set of calculations established by an applicable requirement or approved by the department or the administrator.

(gg) "Real" means a change that results in a point source discharge or nonpoint source load reduction.

(hh) "Reasonable further progress" means incremental point source discharge or nonpoint source load reductions to achieve water quality standards or to implement a total maximum daily load established pursuant to section 303(d) of the clean water act.

(ii) "Reduced discharge level" means the real, surplus, and quantifiable pollutant-specific discharge reduction achieved by a point source.

(jj) "Reduced loading level" means the real, surplus, and quantifiable pollutant-specific load reduction that is achieved by a nonpoint source.

(kk) "Remedial action plan" means a plan developed and implemented to address an area of concern pursuant to the Great lakes water quality agreement of 1978, as amended.

(ll) "Responsible individual" means, for the purposes of signing and certifying as to the truth, accuracy, and completeness of a notice and certification required by this part, any of the following:

(i) For a corporation, then a president, secretary, treasurer, or vice-president in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or an authorized representative of that person if the representative is responsible for the overall operation of 1 or more manufacturing, production, or operating facilities.

(ii) For a partnership or sole proprietorship, then a general partner or the proprietor.

(iii) For a county or municipality or a state, federal, or other public agency, then either a principal executive officer or ranking elected official. For this purpose, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(mm) "Source reduction" means any practice which reduces either of the following:

(i) The amount of any hazardous substance, pollutant, or contaminant entering any wastestream or otherwise released into the environment before recycling, treatment, or disposal.

(ii) Hazards to public health and environment associated with the release of a substance, pollutant, or contaminant.

(nn) "Surface waters of the state" means all of the following, but does not include drainage ways and ponds used solely for wastewater conveyance, treatment, or control:

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- (i) The Great Lakes and their connecting waters.
 - (ii) All inland lakes.
 - (iii) Rivers.
 - (iv) Streams.
 - (v) Impoundments.
 - (vi) Open drains.
 - (vii) Other surface bodies of water within the confines of the state.
 - (oo) "Surplus" means a point source discharge or nonpoint source load reduction greater than that required by an applicable requirement.
 - (pp) "Total maximum daily load" means the maximum amount of a specific pollutant that a waterbody can assimilate and still meet applicable water quality standards and which has been established pursuant to section 303(d) of the clean water act or R 323.1207.
 - (qq) "Trade" means the purchase, sale, conveyance, or other transfer of a registered credit from one person or source to another person or source under this part.
 - (rr) "Trading activities" means all requirements established and all activities regulated by this part.
 - (ss) "True-up" means to correct or make whole an insufficient quantity of discharge reductions and credits that are generated and registered, used, or traded.
 - (tt) "Unregulated source" means any point or nonpoint source for which performance standards, effluent limitations, work practices, and monitoring requirements have not been established by an applicable requirement.
 - (uu) "Use" means the application of a credit to comply with a water quality-based effluent limitation or other applicable requirement or the retirement of a credit to provide a water quality benefit.
 - (vv) "Water quality-based effluent limitation" means a discharge limit developed for a national permit that will ensure that the level of water quality to be achieved by the point source complies with all applicable water quality standards.
 - (ww) "Water quality standards" means R323.1041 et seq. developed under part 31, water resources protection, 1994 PA 451, MCL 324.3101 to 324.3119.
 - (xx) "Wasteload allocation" means the pollutant-specific allocation for an individual point source, which ensures that the level of water quality to be achieved by the point source complies with all applicable water quality standards.
 - (yy) "Watershed" means an area of the land that drains to a common lake, pond, river, stream, or other surface waters of the state delineated and designated as a trading area under this part.
 - (zz) "Watershed management plan" means a comprehensive water resource plan approved by the department under this part and that includes a cap, point and nonpoint source allocations, responsible parties, management strategies to improve water quality or achieve and maintain water quality standards in a specific receiving water or watershed.
- History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3002 Purpose.

Rule 2. (1) The purpose of this part is to establish a voluntary statewide water quality trading program which has all of the following goals:

- (a) Improving water quality and optimizing the costs of achieving and maintaining water quality standards.
- (b) Creating economic incentives for voluntary nonpoint source load reductions, point source discharge reductions beyond those required by the clean water act, implementation of pollution prevention programs, wetland restoration and creation, and the development of emerging pollution control technologies.
- (c) Facilitating the implementation of total maximum daily loads, urban storm water control programs, and nonpoint source management practices required under the clean water act. Nothing in this part shall be construed to obviate the requirement to develop a total maximum daily load for waters that do not meet water quality standards as required by section 303(d) of the clean water act or to delay implementation of a total maximum daily load that has been approved by the department and the administrator.
- (d) Providing incentives for the development of new and more accurate and reliable quantification protocols and procedures.
- (e) Providing greater flexibility through community-based, nonregulatory, and performance-driven watershed management planning.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3003 Applicability.

Rule 3. (1) This part shall apply to all persons and sources that participate in water quality trading.

(2) This part shall apply to the generation, registration, use, banking, and trading of credits and all trading activities that occur under this part.

History: 2002 MR 21, Eff. Nov. 22, 2002.

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R 323.3004 General requirements.

Rule 4. (1) The generation, use, and trading of credits among and between point and nonpoint sources shall occur within the same receiving water or watershed designated under this part.

(2) Credits shall be generated before or contemporaneously with the time they are used or traded.

(3) The generation, use, and trading of credits and all trading activities approved under this part shall be consistent with the following, if applicable:

(a) A total maximum daily load established pursuant to section 303(d) of the clean water act.

(b) A remedial action plan.

(c) A lakewide management plan.

(d) A watershed management plan approved by the department under this part.

(4) Credits used to comply with a daily, weekly, monthly, or seasonal effluent limitation established to achieve or maintain water quality standards in a stream or a lake with a retention time of less than 1 year shall be generated during the same time period for which the effluent limitation applies.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3005 Prohibitions and restrictions.

Rule 5. (1) The use of credits that would cause a violation of water quality standards is prohibited.

(2) Credits generated in one watershed shall not be used or traded in a different watershed. This rule shall not prohibit credits generated in a nonattainment area being used in an attainment area within a watershed designated in a watershed management plan approved by the department under this part.

(3) Trading activities for any bioaccumulative chemical of concern listed below are prohibited:

(a) Chlordane.

(b) 4,4'-ddd.

(c) 4,4'-dde.

(d) 4,4'-ddt.

(e) Dieldrin.

(f) Hexachlorobenzene.

(g) Hexachlorobutadiene.

(h) Hexachlorocyclohexanes.

(i) Alpha-hexachlorocyclohexane.

(j) Beta-hexachlorocyclohexane.

(k) Delta-hexachlorocyclohexane.

(l) Lindane.

(m) Mercury.

(n) Mirex.

(o) Octachlorostyrene.

(p) Polychlorinated biphenyls (pcbs).

(q) Pentachlorobenzene.

(r) Photomirex.

(s) 2,3,7,8-tcdd.

(t) 1,2,3,4-tetrachlorobenzene.

(u) 1,2,4,5-tetrachlorobenzene.

(v) Toxaphene.

(4) Except as provided under 40 C.F.R. §420.03 (2000), and other types of trades approved by the department and the administrator, credits shall not be used to comply with a technology-based effluent limitation.

(5) Nothing in this part shall be construed to obviate the need to obtain a national permit or a permit modification required by an applicable requirement. A point source is prohibited from participating in trading under this part unless a national permit has first been obtained as required under the clean water act.

(6) Nothing in this part shall be construed to prohibit a municipality or regional sewerage authority from developing and implementing its own pretreatment trading program for the purposes of complying with local limitations and to comply with federal technology-based categorical standards to the extent allowed under federal regulations.

(7) The use of banked credits shall occur in a manner consistent with this part, shall be approved by the department before any such activity occurs, and shall be restricted to the following:

(a) Complying with a 1 milligram per liter water quality-based effluent limitation established under R 323.1060(1).

(b) Complying with a water quality based effluent limitation for a source that discharges into a lake or other water body with

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a retention time of more than 1 year.

(8) Banked credits shall not be used to comply with a daily, weekly, monthly, or seasonal water quality-based effluent limitation by a source that discharges into a stream or a lake with a retention time of less than 1 year.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3006 Eligibility requirements for generation of point source discharge and nonpoint source load reductions and credits.

Rule 6. (1) For discharge or load reductions to be generated and registered as credits, all of the following conditions shall be met:

- (a) The discharge or load reductions shall be generated after the effective date of this part.
- (b) The discharge or load reductions shall be real, surplus, and quantifiable.
- (c) The control devices or management practices that have been installed or implemented have been fully and properly maintained from the time they were established and remain so for the time they are registered to generate credits.
- (2) Discharge or load reductions to generate credits may be created by any of the following:
 - (a) Installation or modification of water pollution control equipment.
 - (b) Operational changes and the modification of a process or process equipment.
 - (c) Reformulating raw materials or products.
 - (d) Implementation of pollution prevention programs.
 - (e) Implementation of energy conservation programs.
 - (f) Implementation of early discharge or load reductions before a compliance date specified by an applicable requirement defined in R 323.3001(c)(i); but not for early compliance with a schedule resulting from violations of applicable requirements defined in R 323.3001(c)(i).
 - (g) Implementation of nonpoint source management practices.
 - (h) Implementation of storm water controls or management practices.
 - (i) Restoring or creating and maintaining a wetland.
 - (j) The installation of equipment or implementation management practices at orphan sites of environmental contamination to control discharges to the waters of the state by a person or party that is not responsible for the contamination or liable for response activities under state and federal regulations.
 - (k) The installation, operation, and maintenance of drainage projects designed to control storm water as part of a county drain improvement project.
 - (l) Implementation of streambank erosion controls.
 - (m) Other pollution controls or management practices approved by the department.
- (3) Discharge or load reductions required to achieve compliance with a technology-based effluent limitation established by an applicable requirement shall not be eligible to generate credits under this part.
- (4) A source that generates discharge or load reductions and credits to be used or traded shall discharge directly or otherwise be connected to the receiving water or watershed in which the credits are used or traded.
- (5) Discharge or load reductions made by a source in violation of a monitoring, recordkeeping, or reporting requirement applicable to the specific pollutant for which the discharge or load reduction has been made shall not be eligible to generate credits under this part.
- (6) The implementation of management practices or the installation of control structures required to eliminate the discharge of manure or runoff containing manure or other animal wastes from agricultural operations shall not be eligible to generate credits after 5 years from the effective date of this part.
- (7) Generally accepted agricultural management practices required to abate a nuisance complaint referred to the department under the Michigan right to farm act, 1981 PA 93, MCL 286.471 et seq., shall not be eligible to generate a discharge reduction credit under this part.
- (8) Nonpoint source load reductions which result from implementation of management practices or the installation of control structures under programs administered by the United States department of agriculture, natural resource conservation service, shall be eligible to generate credits in direct proportion to the percent local match and any contribution greater than the local match required under these federal programs.
- (9) Nonpoint source load reductions which result from implementation of projects or programs funded by 1998 PA 288, MCL 324.19601 et seq. and §319 of the clean water act shall not be eligible to generate credits under this part.
- (10) Nothing in this rule shall be construed to prohibit or restrict a municipality from generating credits by installing controls or implementing management practices under publicly funded projects or programs implemented within the same jurisdiction.
- (11) Sources that install control devices or implement management practices to control streambank erosion or storm water or agricultural runoff as part of a pilot project conducted with approval by, or involving the active participation of, the

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department shall be eligible to generate credits that may be used for trading under this part if all of the following conditions are met:

- (a) The control devices have been installed or the management practices implemented within the 18-month period immediately proceeding the effective date of this part.
- (b) The control devices or management practices have been installed or implemented in a manner that is consistent with all applicable provisions of this part.
- (c) All applicable requirements established under this part shall be fully complied with, including the requirements to establish baselines, load reductions and reduced loading levels and the submittal of notices and annual reports.
- (d) The notice and certification required under R 323.3019(1) shall be submitted to the department within 6 months of the effective date of this part.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3007 Nutrient trading; contemporaneous upstream reduction requirements; credit use.

Rule 7. (1) Open nutrient trading may occur in an attainment area or other area where a total maximum daily load has not been established and a watershed management plan has not been approved for purposes of trading under this part if either of the following conditions is met:

- (a) There is a contemporaneous upstream generation of credits to compensate for a use of credits to comply with a water quality-based effluent limitation or other applicable requirement.
- (b) The source using credits to comply with a water quality-based effluent limitation or other applicable requirement discharges to the same receiving water or watershed either upstream or downstream of the source which generates the credits and both of the following conditions are met:
 - (i) The generation of credits is contemporaneous with the use of credits.
 - (ii) The sources which generate and use credits are upstream of the site in the receiving water or watershed for which the applicable water quality-based effluent limitation has been established to meet water quality standards.

(2) The use of credits pursuant to subdivisions (a) and (b) of this subrule shall not be construed to constitute a lowering of water quality pursuant to R 323.1098(8)(k).

(3) The use of credits by a point source to increase the discharge of total phosphorus or total nitrogen under the provisions of R 323.3020 shall be limited to a 20% increase above the discharge level authorized in a national permit, unless a greater use of credits is specifically authorized by special conditions in the permit or by a formal permit modification approved by the department in accordance with federal and state permit regulations and the provisions of this part. The 20% increase of total phosphorus and total nitrogen above the discharge level shall be authorized in the point source national permit before the point source can use credits.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3008 Nutrient trading in areas for which a total maximum daily load or a watershed management plan has been established.

Rule 8. (1) Closed nutrient trading may occur within a receiving water or in a watershed where water quality standards are not being met for the pollutant that is being traded if all of the following conditions are met:

- (a) A total maximum daily load for the nutrient to be traded has been approved by the department and the administrator pursuant to section 303(d) of the clean water act.
- (b) The point sources and nonpoint sources that generate, use, or trade credits shall be located in the same nonattainment area and included in the inventory upon which the total maximum daily load is based.
- (c) The nutrient cap, point source waste load allocations and nonpoint source load allocations shall constitute the respective baselines for the generation, use, and trading of credits.
- (d) The generation, registration, use, and trading of credits shall be consistent with the total maximum daily load and this part.

(2) Closed nutrient trading may occur within any receiving water or in a watershed for which a watershed management plan has been prepared for the purpose of trading if all of the following conditions are met:

- (a) The watershed management plan has been approved by the department pursuant to the provisions of R 323.3023.
- (b) The point sources and nonpoint sources that generate, use, and trade credits shall be located in the same receiving water or watershed and included in the inventory upon which the watershed management plan is based.
- (c) The nutrient cap and point source wasteload allocations, and nonpoint source load allocations specified in the watershed management plan to achieve or maintain water quality standards shall constitute the respective baselines for the generation and use of credits.
- (d) The generation, registration, use, and trading of credits shall be consistent with the approved watershed management plan and this part.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3009 Other types of trading; trading of pollutants other than nutrients; intra-plant trading; cross-pollutant trading; trading under a remedial action or lakewide management plan.

Rule 9. (1) Except for the provisions in R 323.1005(3), nothing in this part shall be construed to prohibit the department from approving other types of water quality-based trades that are not specifically provided for in this part. Trades that are not specifically provided for in this part, including trading of pollutants other than total phosphorus and total nitrogen, intra-plant trading, and cross pollutant trading, must be authorized in national permits.

(2) Trading of pollutants other than total phosphorus and total nitrogen, intra-plant trading, cross pollutant trading, trading under a remedial action or lakewide management plan, and any other types of trades shall occur in a manner consistent with all applicable requirements of this part and shall be approved by the department before any such activity occurs.

(3) A person or source seeking to engage in other types of trades under subrule (2) of this rule shall do either of the following:

(a) Demonstrate that social or economic development and the benefits to the area in which the receiving waters are located would be forgone if the use of credits is not allowed in accordance with the provisions of R 323.1098(4).

(b) Show that the use of credits does not constitute a lowering of water quality pursuant to R 323.1098(8) or (9).

(4) Other types of trades that are embodied in or affect a national permit shall be subject to final approval by the United States environmental protection agency.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3010 Baselines; general requirements.

Rule 10. (1) Baselines shall be established by using the most accurate, representative, and reliable process and operational information, flow and monitoring data, discharge and loading data, and records that are available. The baseline and discharge and load reductions shall be calculated using methods and procedures specified by an applicable requirement where they exist.

(2) Unless specified otherwise by an applicable requirement, the baseline for all sources, except storm water sources regulated under a national permit for which a numerical effluent limitation has not been established, shall be established by using the information and data representative of the 3-year period before the date that a change is made to generate a discharge or load reduction. A different time period that is more representative of historical operations and provides more accurate and reliable actual discharge or existing loading data may be used if approved by the department.

(3) The baseline for storm water sources regulated under a national permit for which a numerical effluent limitation has not been established shall be the pollutant-specific loading achieved through implementation of management practices specified in or approved under a national permit at the time a change is made to generate a discharge or load reduction.

(4) Unless specified otherwise by an applicable requirement, baselines for agricultural, industrial, urban, and residential storm water runoff shall be calculated by using the meteorological information and precipitation data for a 10-year period or the period-of-record, whichever is longer. This information and data shall be obtained from the nearest national weather service station unless a different location or source is approved by the department.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3011 Baseline for point sources other than storm water; reduced discharge level; generation of discharge reductions and credits.

Rule 11. (1) The point source baseline shall be the actual or allowed discharge level that complies with the most protective of any of the following:

(a) A water quality-based effluent limitation established by an applicable requirement.

(b) A cap and wasteload allocation specified under a total maximum daily load.

(c) A cap and wasteload allocation specified in a watershed management plan approved by the department under this part.

(d) A cap and wasteload allocation determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.

(2) Margins of safety achieved in practice shall be maintained by using the actual discharge flows and concentrations to calculate the baseline under subrule (3) of this rule.

(3) The point source baseline shall be expressed in the pounds of a specific pollutant discharged per day and calculated by using the following equation:

$$B = f \times c \times k$$

where:

B = the baseline

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f = flow expressed in million gallons per day (mgd)
 c = pollutant concentration expressed in milligrams per liter (mg/l)
 k = a unit conversion constant of 8.346 liter pounds per million gallons milligrams.

(4) The reduced discharge level (RDL) which will result after changes or methods and procedures have been implemented to generate discharge reductions shall be calculated by using the following equation:

$$RDL = f_r \times c_r \times k$$

where:

RDL = reduced discharge level
 F_r = flow after changes have been made to generate discharge reductions, expressed in million gallons per day (mgd)
 C_r = pollutant concentration after changes have been made to generate discharge reductions, expressed in milligrams per liter (mg/l)
 k = a unit conversion constant of 8.346 liter pounds per million gallons milligrams.

(5) The quantity of discharge reductions generated shall be determined by subtracting the reduced discharge level calculated under subrule (4) of this rule from the baseline calculated under subrule (3) of this rule.

(6) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of discharge reductions calculated under subrule (5) of this rule minus the water quality contribution required under R 323.3016(1).

(7) The same methods and procedures shall be used to calculate the baseline, reduced discharge level, discharge reductions generated, and credits. The baseline, reduced discharge level, and quantity of discharge reductions generated shall be expressed in the same units.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3012 Baseline for sources of storm water regulated under a national permit; reduced discharge or loading level; generation of discharge or load reductions and credits.

Rule 12. (1) The baseline shall be the numerical effluent limitation or the pollutant-specific loading achieved after implementation of management practices specified in or approved under a national permit.

(2) The baseline, reduced discharge level, generation of discharge reductions, and credits for storm water sources with numerical effluent limitations specified by a national permit shall be calculated by using R 323.3011(2), (3), (4), (5), (6), and (7).

(3) The baseline, reduced loading level, generation of load reductions, and credits for storm water sources controlled through the implementation of management practices specified by national permit shall be calculated by using R 323.3013(2), (3), (4), (5), and (6).

(4) Monitoring data and actual measurements of load reductions achieved in practice from changes in land use, pollution control facilities, and implementation of management practices shall be used where required by a permit; and, otherwise, may be used where such information is available.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3013 Baseline for unpermitted nonpoint sources of storm water runoff other than agriculture, reduced loading level, and generation of load reductions and credits.

Rule 13. (1) The storm water runoff baseline shall be either of the following:

(a) For nonpoint sources that are not subject to an applicable requirement, the pollutant-specific loading associated with existing land uses and management practices, if any.

(b) For nonpoint sources that are subject to an applicable requirement, the most protective of any of the following:

(i) A pollutant-specific cap and loading allocation specified in a total maximum daily load.

(ii) A pollutant-specific cap and loading allocation or the management practices specified in watershed management plan approved by the department under this part.

(iii) A pollutant-specific cap and loading allocation or the management practices determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.

(2) If not otherwise specified by an applicable requirement, the storm water runoff baseline shall be calculated by using the equations in this subrule.

(a) The pollutant-specific loading factor (m_l) shall be computed for each land use (l) within a watershed or drainage area by the following equation 1:

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$$M_L = EMC_L * R_L * K$$

where:

M_L = pollutant-specific loading factor for land use L (lbs/ac/yr).

EMC_L = event mean concentration of storm water runoff from a specific land use L (mg/l) as specified in table 1 or as approved by the department on a case-by-case basis.

R_L = total average annual storm water runoff from land use L computed from equation 2 (in/yr).

$K = 0.2266$, a unit conversion constant, for all parameters.

Table 1. Event mean concentrations.

Land use category (non-site specific)	Percent Impervious	TSS (mg/l)	BOD (mg/l)	TP (mg/l)	DP (mg/l)	TKN (mg/l)	NO ₂₊₃ (mg/l)	Pb (ug/l)	Cu (ug/l)	Zn (ug/l)	Cd (ug/l)
Forest/rural open	N/a	51	3	0.11	0.027	0.94	0.80	0.0	0.0	0.0	0.0
Urban open	0.5%	51	3	0.11	0.03	0.94	0.80	14.2	0.0	40.2	0.8
Agricultural	N/a	145	3	0.37	0.09	1.92	4.06	0.0	0.0	0.0	0.0
Low density residential	10.0%	70	38	0.52	0.27	3.32	1.83	56.9	26.2	161.1	3.9
Medium density residential	30.0%	70	38	0.52	0.27	3.32	1.83	56.9	26.2	161.1	3.9
High density residential	N/a	97	14	0.24	0.08	1.17	2.12	40.5	33.0	217.9	3.2
Commercial	90.0%	77	21	0.33	0.17	1.74	1.23	49.3	37.0	156.3	2.7
Industrial	80.0%	149	24	0.32	0.11	2.08	1.89	72.4	58.0	670.8	4.8
Highways	90.0%	141	24	0.43	0.22	1.82	0.83	49.3	37.0	156.3	2.7
Water/wetlands	100.0%	6	4	0.08	0.04	0.79	0.59	11.1	6.5	30.3	0.6

(b) The average annual storm water runoff volume for the pervious and impervious areas in each land use category shall be calculated by multiplying the average annual rainfall volume by a runoff coefficient. The total average annual surface runoff from a specific land use, l, shall be calculated by weighting the pervious and impervious area runoff factors for each land use category by the following equation 2:

$$R_L = [C_p + (C_I - C_p) IMP_L] * I$$

where:

R_L = total average annual surface runoff from land use L (in/yr).

IMP_L = fractional imperviousness of land use L, as specified in Table 1 or as approved by the department on a case-by-case

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basis.

I = long-term average annual precipitation (in/yr).

C_p = pervious area runoff coefficient of 0.2 or a different runoff coefficient approved by the department.

C_i = impervious area runoff coefficient of 0.95 or a different runoff coefficient approved by the department.

and, where the total runoff in a watershed shall be the area-weighted sum of R_L for all land uses.

(c) The average total annual load from a watershed or drainage area shall be computed by the following equation 3:

$$Load_P = \sum M_L * A_L$$

where:

$Load_P$ = total average annual load, expressed in pounds.

M_L = loading factor for land use L (lbs/ac/yr) from equation 1.

A_L = area (acres) for land use L .

(d) The percent storm water load reduction from existing management practices in each subbasin of the watershed or drainage area shall be calculated by the following equation 4:

$$P_{L, SB} = (AC_{1, SB} * Rem_1) \dots \dots (AC_{n, SB} * Rem_n)$$

where:

$P_{L, SB}$ = percent of annual storm water pollutant load captured in subbasin SB by application of the n management practices on land use L .

$AC_1 \dots AC_{n, SB}$ = fractional area coverage of management practices 1 through n on subbasin SB .

$Rem_1 \dots Rem_n$ = removal efficiency of management practices 1 through n derived from table 2.

Table 2. Annual pollutant removal rates for retention and detention basin storm water management practices.

Pollutant	Pollutant removal rates (%)			
	Extended dry Detention	Wet Detention	Retention	Swales
BOD	30%	30%	90%	30%
COD	30%	30%	90%	30%
TSS	90%	90%	90%	80%
TDS	0%	40%	90%	10%
Total-P	30%	50%	90%	40%
Dissolved-P	0%	70%	90%	10%
TKN	20%	30%	90%	40%
NO ₂ +NO ₃	0%	30%	90%	40%
Lead	80%	80%	90%	75%
Copper	60%	70%	90%	50%
Zinc	50%	50%	90%	50%
Cadmium	80%	80%	90%	65%

(e) The storm water runoff baseline for a watershed or drainage area under a given land use scenario and existing management practices shall be calculated by subtracting the percent storm water runoff load reductions calculated under subdivision (d) of this subrule from the average total annual loading calculated under subdivision (c) of this subrule and summing over all land uses and all subbasins by the following equation 5:

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$$MASS = \sum_{SB=1}^N \sum_{L=1}^N M_{L,SB} * A_{L,SB} * (1 - P_{L,SB})$$

where:

MASS = annual storm water runoff pollutant-specific loading for the watershed or drainage area, expressed in lbs/yr for a given land use scenario.

- (3) Reduced loading levels achieved after making changes in land use or the implementation of new or modified management practices shall be calculated by using the procedure and equations specified in subrule (2)(a), (b), (c), (d), and (e) of this rule.
 - (4) The quantity of storm water load reductions generated shall be calculated by subtracting the reduced loading levels calculated under subrule (3) of this rule from the storm water runoff baseline calculated under subrule (2) of this rule.
 - (5) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of storm water load reductions calculated under subrule (4) of this rule minus the water quality contribution required under R 323.3016(2).
 - (6) The same methods and procedures shall be used to calculate the baseline, reduced loading level, load reductions generated, and credits. The baseline, reduced loading level, and quantity of load reductions generated shall be expressed in the same units.
 - (7) Monitoring data and actual measurements of pollutant load reductions achieved in practice from changes in land use and implementation of management practices may be used where such information is available.
- History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3014 Agricultural nonpoint source baseline; reduced loading level; generation of load reductions and credits.

Rule 14. (1) The baseline for agricultural operations shall be the most protective of any of the following:

- (a) The pollutant-specific loading from existing agricultural operations that are not subject to an applicable requirement.
 - (b) The pollutant-specific loading achieved after implementation of management practices established by an applicable requirement.
 - (c) A pollutant-specific cap and loading allocation specified in a watershed management plan approved by the department under this part.
 - (d) A pollutant-specific cap and loading allocation determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.
- (2) The baseline for agricultural operations that are not subject to an applicable requirement shall be established by a plan prepared by a person who is a certified planner under the program administered by the United States department of agriculture, natural resource conservation service.
- (3) The plan required under subrule (2) of this rule shall include all of the following:
- (a) Documentation of existing agricultural operations and management practices.
 - (b) Quantification of the pollutant-specific loading from existing operations and management practices.
 - (c) Identification of operational changes and management practices which may be implemented to reduce loadings.
 - (d) Quantification of the pollutant-specific load reductions from each operational change and management practice recommended in the plan.
- (4) If not specified otherwise by an applicable requirement, the baseline and pollutant-specific reduced loading level for each operational change and management practice recommended in the plan prepared pursuant to subrules (2) and (3) of this rule shall be established by one of the following methods and procedures, as applicable:
- (a) For sediment, sediment-borne phosphorus, sediment-borne nitrogen, and concentrated animal feedlot runoff, "pollutants controlled calculation and documentation," Michigan Department of environmental quality, 1999.
 - (b) For commercial fertilizer application and manure management, methods and procedures approved by the department on a case-by-case basis.
 - (c) Alternate methods and procedures or models provided electronically by the department may be used for sediment, sediment-borne phosphorus, sediment-borne nitrogen, concentrated animal feedlot runoff, commercial fertilizer application, and manure management when they become available.
- (5) The quantity of load reductions generated shall be determined by subtracting from the baseline calculated under subrule (1) or (2) of this rule, the combined reduced loading level for each operational change, and management practice implemented under the plan as calculated under subrule (4) of this rule.
- (6) The baseline, reduced loading levels, and quantity of load reductions generated shall be expressed in pounds of a specific pollutant per year or month.
- (7) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of load

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reductions calculated under subrule (6) of this rule minus the water quality contribution required under R 323.3016(2).

(8) The same methods and procedures shall be used to calculate the baseline, reduced loading level, load reductions generated, and credits. The baseline, reduced loading level, and quantity of load reductions generated shall be expressed in the same units.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3015 Streambank erosion nonpoint source baseline; reduced loading level; generation of load reductions and credits.

Rule 15. (1) The baseline for streambank erosion sources shall be one of the following, whichever is applicable and most protective:

(a) The pollutant-specific loading from existing streambank erosion sources that are not subject to an applicable requirement.

(b) The pollutant-specific loading achieved after implementation of management practices established by an applicable requirement.

(c) A pollutant-specific cap and loading allocation specified in watershed management plan approved by the department under this part.

(d) A pollutant-specific cap and loading allocation determined by the department to be consistent with water quality standards and specified in a remedial action plan or lakewide management plan.

(2) If not specified otherwise by an applicable requirement, the baseline and pollutant-specific reduced loading level for each operational change and management practice implemented to control streambank erosion shall be established by the most conservative of the following methods:

(a) The use of historical aerial photographs over a period of at not less than 10 years and current aerial photographs representative of the site and approved by the department.

(b) Lateral recession rates calculated in accordance with procedures specified in "pollutants controlled calculation and documentation," Michigan Department of environmental quality, 1999.

(c) Using gully erosion estimates at ½ of the amount calculated as specified in the USDA field office technical guide for Michigan which is adopted by reference in R323.3026.

(d) Other methods or procedures approved by the department.

(3) The quantity of load reductions generated shall be determined by subtracting from the baseline calculated under subrule (1) or (2) of this rule, the reduced loading level for each control installed and management practice implemented to control streambank erosion.

(4) The baseline, reduced loading levels, and quantity of load reductions generated shall be expressed in pounds of a specific pollutant per month or year.

(5) The quantity of credits generated and which may be registered under R 323.3019(1) shall be the quantity of load reductions calculated under subrule (3) of this rule minus the water quality contribution required under R 323.3016(2).

(6) The same methods and procedures shall be used to calculate the baseline, reduced loading level, load reductions generated, and credits. The baseline, reduced loading level, and quantity of load reductions generated shall be expressed in the same units.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3016 Water quality contribution and uncertainty.

Rule 16. (1) Except for a source of storm water regulated under a national permit, each point source that generates discharge reductions and registers credits under this part shall contribute 10% of the discharge reductions to the department to address uncertainty and to provide a net water quality benefit. This 1-time 10% contribution shall be effective at the time the department issues a notice of completeness for a notice of generation.

(2) Each storm water source regulated under a national permit and each nonpoint source that generates load reductions and registers credits under this part shall contribute 50% of the load reductions to the department to address uncertainty and to provide a net water quality benefit. A source may request approval from the director for a contribution less than 50% but not less than 10%. This 1-time contribution shall be effective at the time the department issues a notice of completeness for a notice of generation.

(3) The 1-time contribution required under subrules (1) and (2) of this rule shall be calculated in the same units and for the same time periods during which the discharge or load reductions are made to generate credits.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3017 Discount factors applied to the use of credits.

Rule 17. (1) A source that uses credits generated by another source upstream of a wetland, pond, lake, or impoundment located between the sources in an attainment area or a nonattainment area for which a total maximum daily load has not been

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established shall obtain a quantity of credits 10% greater than the amount required to comply with a water quality-based effluent limitation specified by an applicable requirement. This equivalence factor shall be applied at the time a notice of use is submitted under R 323.3020(1).

(2) A source that uses credits in a nonattainment area for which a total maximum daily load has not been established shall obtain a quantity of credits 10% greater than the amount required to comply with a water quality-based effluent limitation or the loading that would be achieved in practice through implementation of management practices specified by an applicable requirement, whichever is applicable. This water quality factor shall be applied at the time a notice of use is submitted under R 323.3020(1).

(3) Discount factors different than those specified in subrules (1) and (2) of this rule may be established by the department where necessary to achieve and maintain water quality standards or as a requirement for a watershed management plan or other type of trade authorized by the department pursuant to this part.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3018 Nutrient discharge and load reductions; early reductions and credit life.

Rule 18. (1) Banked credits for total phosphorus and total nitrogen which are entered in the water quality trading registry under R 323.3021(1) may be used or traded for a period of 5 calendar years after the year of generation, subject to the prohibitions, restrictions, and conditions established in this part.

(2) Point source discharge reductions and nonpoint source load reductions of total phosphorus or total nitrogen that are necessary to comply with an applicable requirement defined in R 323.3001(c)(i) and which occur before the final compliance date specified by the applicable requirement defined in R 323.3001(c)(i); excluding early compliance with a schedule resulting from violations of applicable requirements defined in R 323.3001(c)(i), may be registered for use at a later time. These banked credits may be used or traded for a period of 5 calendar years after the year of generation or 1 calendar year after the effective date of final compliance, whichever occurs first, subject to the prohibitions, restrictions, and conditions established in this part.

(3) Credits not used within the credit life specified in subrules (1) and (2) of this rule shall be retired to provide a water quality benefit and shall not be eligible for use under this part.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3019 Notification requirements for generation of discharge, load reductions, and registration of credits.

Rule 19. (1) A person who generates a discharge or load reduction and wishes to register credits shall provide, to the department, a notice and certification of the discharge or load reduction being generated and the credits being registered.

(2) The notification required by subrule (1) of this rule shall include all of the following information:

(a) The name and location, by street address, zip code, county, and watershed, of the source, process, or operation at which discharge or load reductions have been or will be generated and the location where records are or will be kept. Point sources shall also provide the latitude and longitude coordinates of the outfalls at which discharge reductions are being generated. Unpermitted sources of storm water runoff and other nonpoint sources shall either provide latitude and longitude coordinates or section, township, and range to the nearest one quarter.

(b) The name, street address, and telephone number of the responsible individual providing notice and certification of the discharge or load reductions generated and credits being registered.

(c) The numerical effluent limitation or management practices specified by an applicable requirement, the actual discharge level or existing management practices, and associated loadings that constitutes the baseline, the reduced discharge level, or loading that must be complied with during the time reductions are made to generate credits.

(d) The total pollutant-specific quantity of discharge or load reductions generated and the quantity of credits to be registered, by watershed.

(e) An identification of the source, process, or operation at which discharge or load reductions have or will be generated.

(f) A description of the method or methods used to generate the discharge or load reduction.

(g) The date that the discharge or load reduction will take effect and the period of time that the reduction will remain in effect.

(h) The methods, procedures, and calculations used to determine the baseline, reduced discharge, or loading level, discharge or load reduction generated, and credits registered.

(i) An identification of quantification and monitoring methods and procedures established by an applicable requirement, if any.

(3) The notice required by subrule (2) of this rule shall be accompanied by a certification by the responsible individual of all of the following:

(a) That to the best of the responsible individual's knowledge, the information contained in the notice is true, accurate, and complete.

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(b) The discharge or load reductions are real, surplus, and quantifiable, and if the reductions have not already been generated, that the reductions will be generated by the date and for the period of time specified in the notice of generation that has been determined to be complete by the department pursuant to subrule (4) of this rule.

(c) The discharge or load reductions have not been used elsewhere as credits.

(4) The notice and certification required under this rule shall be submitted electronically or by certified mail to the department. The department shall review the notice and certification for completeness and consistency with this part. Within 30 days of receipt of the notice and certification, the department shall make a determination and provide a written response to the person submitting the notice and certification. A determination made by the department shall be considered a final agency decision subject to review by a court of competent jurisdiction under section 631 of 1961 PA 236, MCL 600.631. A determination of completeness and consistency by the department does not constitute an agency certification that the credits are real, surplus, or quantifiable. If the notice and certification include all the information required under subrules (2) and (3) of this rule and the department determines that the generation of credits is consistent with all applicable provisions of this part, then the department shall, within 5 business days, enter the information required by R 323.3021(2) in the water quality trading registry. Immediately upon entry in the water quality trading registry, the information in the notice and certification shall be available to the public, except for information that is determined to be confidential under the provisions of section 3111 of part 31, water resources protection, 1994 PA 451, R 323.2128, and the freedom of information act, 1976 PA 442, MCL 15.231 et seq. If the department determines that the notice and certification do not include all the information required under subrules (2) and (3) of this rule or that the proposed generation of credits is inconsistent with any provision of this part, then the discharge or load reductions are not eligible to generate credits. A determination of incompleteness or inconsistency made by the department under this subrule shall include an explanation of why the determination was made. A determination of incompleteness or inconsistency shall not preclude a person from submitting a corrected or revised notice and certification.

(5) The methods used, operational changes made, or management practices implemented to generate credits for which a complete notice and certification is submitted to the department shall become legally enforceable requirements, upon the effective date of the determination of completeness issued by the department or the date that the discharge or load reductions will be generated as specified in the notice determined to be complete by the department.

(6) Issuance of a notice of credit generation by the department pursuant to subrule (4) of this rule shall constitute departmental notice that a point source is subject to alternate national permit limits in the national permit for the period specified in the notice. The discharge from a source shall be considered by the department to be in compliance if the actual discharge is equal to or less than the baseline specified in the notice minus the quantity of discharge reductions that are generated.

(7) A source which generates credits pursuant to this part shall report to the department the baseline, the quantity of discharge or load reductions, and the credits generated for each pollutant, expressed in pounds per day, week, month, or year. Except for storm water sources without numerical effluent limitations specified by a national permit, point sources shall submit this information to the department on discharge monitoring report forms provided by the department as necessary to be consistent with the effluent limitations, monitoring, and reporting requirements specified in a national permit. The discharge monitoring report forms provided by the department shall include data fields to show the baseline and the quantity of discharge reductions and credits generated for each pollutant expressed in pounds per day, week, month, or year, as necessary to be consistent with the corresponding effluent limitation specified in the national permit. For nonpoint sources and storm water sources subject to a national permit without numerical effluent limitations, a quarterly report shall be submitted to the department on a form provided by the department. The reports shall include all of the following information:

(a) The name and location of the site.

(b) The pollutants controlled.

(c) The control devices installed or management practices implemented and dated completed.

(d) The lineal feet or acres for which controls or management practices have been completed.

(e) A calculation of the quantity of each pollutant controlled using the same methods and procedures used to determine the baseline, load reductions, and credits.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3020 Notification requirements for the registration, use, and trading of credits.

Rule 20. (1) A person applying to use or trade credits under the provisions of this part shall provide prior notice to the department. The notice shall include all of the following information:

(a) The name and location, by street address, zip code, county, and watershed, of the source, process, or operation at which credits are to be used or traded. Point sources shall also provide the latitude and longitude coordinates of the outfalls where credits are to be used. Nonpoint sources where credits are to be used shall also provide latitude and longitude coordinates or section, township, and range to the nearest one quarter.

(b) The name, address, and telephone number of the responsible individual providing notice of use or trading of credits.

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- (c) The numerical effluent limitation or management practices specified by an applicable requirement, the number of credits used to comply with the effluent limitation or the loadings associated with management practices specified by an applicable requirement, and the actual discharge level, management practices, and associated loading that must be complied with during the use of credits.
 - (d) The pollutant-specific quantity of credits, in pounds per day, week, month, or year, that are used or traded, on a watershed basis.
 - (e) A description of the source, process, or operation at which the credits are to be used.
 - (f) An identification of all applicable requirements to be complied with through the use of credits and the methods and procedures used to quantify loading and to determine compliance with each applicable requirement.
 - (g) The effective dates of use of the credits and calculations demonstrating compliance through the use of credits.
 - (h) A copy of the notice of generation required under R 323.3019(1) for the credits to be traded or used.
- (2) The notice required by subrule (1) of this rule shall be accompanied by a certification by the responsible individual, that the information in the notice is true, accurate, and complete and that the source, process, or operation shall be operated in compliance with all applicable requirements and the conditions and requirements for the use of credits under this part.
- (3) The notice and certification required under this rule shall be submitted electronically or by certified mail to the department. The department shall review the notice and certification for completeness and consistency with this part. The department shall enter the proposed notice of use in the registry within 3 business days of receipt. Within 30 days of receipt of the notice and certification, the department shall make a determination as to whether the notice and certification are complete and the proposed use is consistent with all applicable provisions of this part, and provide a written response to the person submitting the notice and certification. A determination made by the department shall be considered a final agency decision subject to review by a court of competent jurisdiction under section 631 of 600.631 1961 PA 236, MCL. If the notice and certification include all the information required under subrules (1) and (2) of this rule and the department determines that the proposed use of credits is consistent with all applicable provisions of this part, then the department shall, within 5 business days, enter the information required by R 323.3021(2) in the water quality trading registry. Immediately upon entry in the water quality trading registry, the information in the notice and certification shall be available to the public, except for information that is determined to be confidential under the provisions of section 3111 of part 31, water resources protection, 1994 PA 451, R 323.2128, and the freedom of information act, 1976 PA 442, MCL 15.231 et seq.
- (4) The department shall not issue a determination of completeness and consistency for a notice and certification that does not provide all the information required under subrules (1) and (2) of this rule or for a proposed use of credits that the department determines would violate water quality standards, or is inconsistent with any other applicable provision of this part. If the department determines the notice and certification are incomplete or the department determines the proposed use of credits is not consistent with water quality standards, or other provisions of this part, then the proposed use of credits shall not occur. The determination made by the department under this rule shall explain why the determination of incompleteness and inconsistency was made. A determination of incompleteness or inconsistency with the provisions of this part by the department shall not preclude a person applying to use credits from submitting a revised notice and certification to correct the inconsistencies identified by the department.
- (5) The methods used, and operational changes made, to use credits for which a notice and certification are determined to be complete by the department shall become legally enforceable operating requirements, effective on the date the department issues a notice of completeness, or the time period that is specified in the notice of use determined to be complete by the department.
- (6) A person who purchases, trades, or uses credits under this part shall include the price paid for the credits in the notice required by subrule (1) of this rule, or by separate written notice to the department within 7 business days of the purchase, trade, or use.
- (7) A person who has registered the use of credits with the department shall be allowed a period of time, not to exceed 60 days, commencing with the end of the use period specified in the notice of use to amend the notice of use and to submit a notice and certification pursuant to R 323.3019(1) to register any unused credits in excess of the quantity needed for the uses specified in the original notice of use.
- (8) Issuance of a notice for use of credits by the department pursuant to subrule (3) of this rule shall constitute departmental notice that a point source is subject to alternate national permit limits for the period specified in the notice. The discharge from a source shall be considered by the department to be in compliance if the actual discharge is equal to or less than the water quality-based effluent limitation specified in the national permit plus the credits achieved by the source or sources that generate the credits used by the source expressed in pounds per day, week, month, or year, and minus any discount factor applied to the use of credits under R323.2019 as necessary to be consistent with the corresponding effluent limitation specified in a national permit.
- (9) A source which uses credits pursuant to this part shall report to the department the number of credits used for each pollutant, expressed in pounds per day, week, month, or year. For point sources, this information shall be submitted to the

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department through discharge monitoring reports provided by the department as necessary to be consistent with the corresponding effluent limitation specified in a national permit. The discharge monitoring report forms provided by the department shall include data fields to show the quantity of credits used for each pollutant, expressed in pounds per day, month, or year as necessary to be consistent with the corresponding effluent limitation specified in a national permit. For nonpoint sources, an annual report shall be submitted to the department on a form provided by the department.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3021 Water quality trading registry.

Rule 21. (1) The department shall establish and maintain a water quality trading registry for all of the following purposes:

- (a) Registering discharge and load reductions that are generated under this part.
- (b) Registering and tracking the generation, use, and trading of credits.
- (c) Registering the discharge and load reductions that are contributed to the state for retirement as a water quality contribution under R 323.3016(1) and (2).
- (d) Providing real time public access to information on the water quality trading program.
- (2) The water quality trading registry shall contain all the information required by R 323.3019(2) and R 323.3020(1).
- (3) The water quality trading registry shall be updated daily by the department.
- (4) The department shall make all of the following information contained in the water quality trading registry available to the public through daily updates to an electronic bulletin board:
 - (a) The name and location, by address, county, and receiving water or watershed, of the sources, processes, and operations at which discharge or load reductions have been or will be generated.
 - (b) A brief description of the source, process, or operations at which discharge or load reductions and credits have been or will be generated.
 - (c) The numerical effluent limitation or management practices specified by an applicable requirement, the actual discharge level or existing management practices, and associated loadings that constitute the baseline, the reduced discharge level, or loading that must be complied with during the time reductions are made to generate credits.
 - (d) The pollutant-specific quantity of credits, in pounds per day, week, month, or year that have been registered.
 - (e) A brief description of the method or methods used, or to be used, to generate discharge or load reductions and credits.
 - (f) The effective date and the life of credits that have been or will be generated.
 - (g) Identification of the methods and procedures used to quantify the generation of discharge or load reductions, and the use of credits to comply with applicable requirements.
 - (h) The name and location, by address, county, and receiving water or watershed, of the source, process, and operations at which credits are being, or will be, used.
 - (i) A description of the source, process, or operations at which credits are, or will be, used.
 - (j) The numerical effluent limitation or management practices specified by an applicable requirement, the number of credits used to comply with the effluent limitation or the loadings associated with management practices specified by an applicable requirement, and the actual discharge level, management practices, and associated loading that must be complied with during the use of credits.
 - (k) The pollutant-specific quantity of credits used, in pounds per day, week, month, or year on a watershed basis.
 - (l) The effective date and period of time during which credits will be used.
 - (m) An identification of the applicable requirement that credits are being or will be used to comply with.
 - (n) The net water quality benefit, by pollutant, for each watershed where trading occurs.
- (5) The responsible individual who certified the generation or use of credits shall notify the department of any data entry errors and necessary corrections to the information posted on the electronic bulletin board within 10 business days of the receipt of a determination of completeness from the department. The department shall promptly correct any data entry errors on the electronic bulletin board.

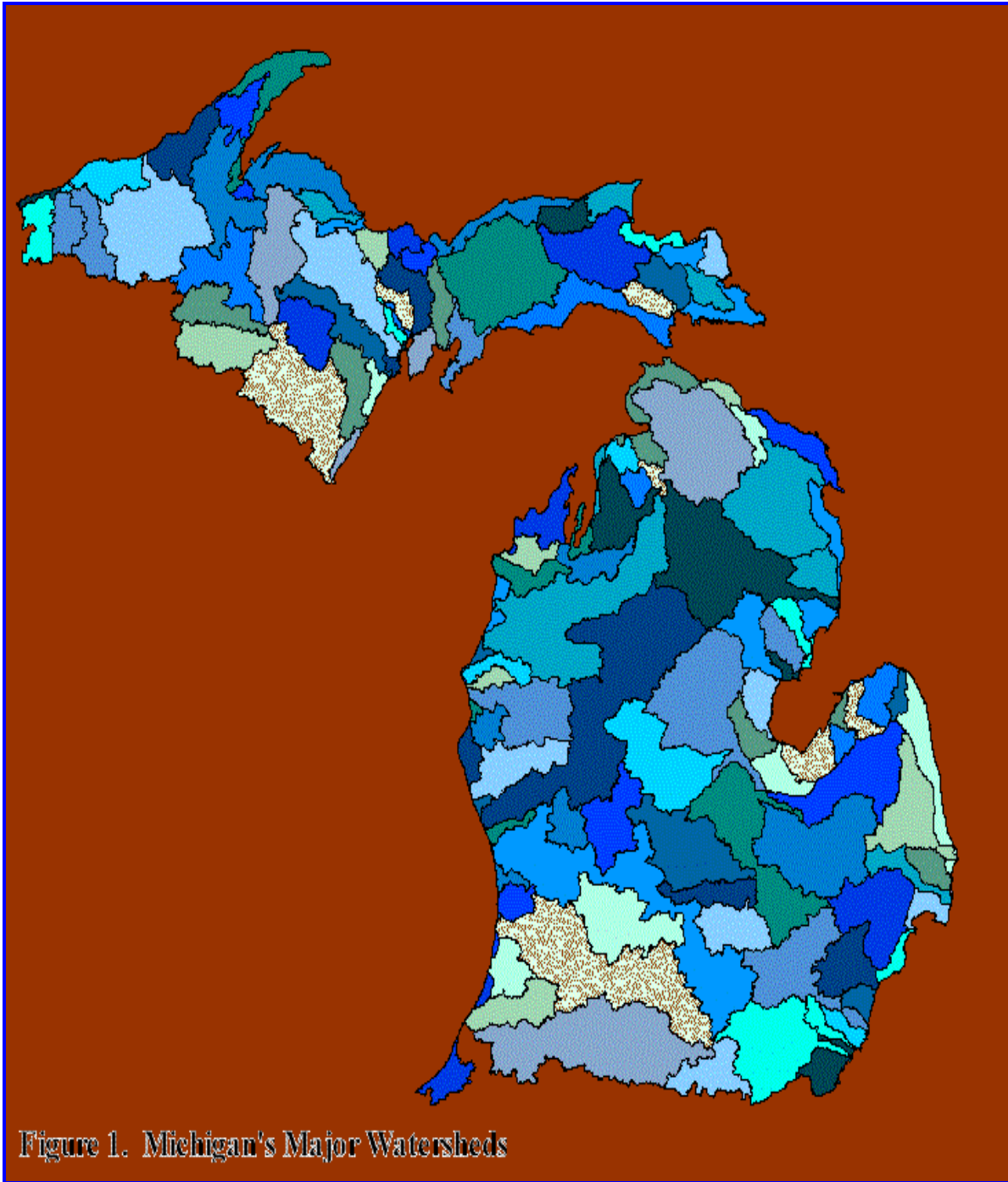
History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3022 Delineation of watersheds for purposes of water quality trading.

Rule 22. (1) A watershed in which trading occurs under this part shall be delineated by one of the following methods, whichever is applicable:

- (a) For open nutrient trading, the watersheds shall be delineated by the department's map of Michigan's major watersheds (figure 1). This map may be obtained electronically from the department's web page or from the department's land and water management division.

History: 2002 MR 21, Eff. Nov. 22, 2002.



(b) For closed nutrient trading in areas for which a total maximum daily load has been established, the watersheds shall be delineated as described in the section 303(d) of the clean water act list prepared by the department and approved by the administrator.

(c) For closed nutrient trading in areas for which the department has approved a watershed management plan under this part, the watershed shall be the surface water and area identified and delineated in the plan.

(d) For other types of trades approved by the department under this part, the trading area for the specific pollutant or pollutants to be traded shall be established on a case-by-case basis.

History: 2002 MR 21, Eff. Nov. 22, 2002.

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R 323.3023 Watershed management plans for water quality trading; submittal; approval.

Rule 23. (1) Water quality trading under this part may occur under any of the following plans that include all the information required in subrule (2) of this rule:

- (a) A plan approved by the department and the administrator for implementation of a total maximum daily load developed under section 303(d) of the clean water act.
 - (b) A remedial action plan or lakewide management plan that has been determined by the department to be consistent with water quality standards.
 - (c) A watershed management plan developed under a grant awarded by the department under section 319 of the clean water act and implemented with other sources of funding.
 - (d) A watershed-based storm water management program or a storm water pollution prevention initiative approved by the department under a national permit.
 - (e) A watershed-based storm water management program submitted under a voluntary national permit issued by the department.
 - (f) A nonpoint source watershed management plan developed under a grant awarded by the department under the clean Michigan initiative, 1998 PA 287, MCL 324.8801 et seq. and implemented with other sources of funding.
- (2) In addition to the plan content and specifications established by an applicable requirement, each plan listed in subrule (1) of this rule shall also include all of the following information for the purpose of water quality trading:
- (a) An identification and statement of the purpose of the plan.
 - (b) An identification and delineation of the boundaries of the receiving water or watershed for which the plan has been prepared and where trading may occur.
 - (c) A pollutant-specific inventory of point and nonpoint sources that may engage in trading in the plan area.
 - (d) A pollutant-specific cap for the receiving water or watershed that includes all the point and nonpoint sources that may engage in trading in the plan area and that is consistent with achieving and maintaining water quality standards.
 - (e) Point and nonpoint source baseline allocations or management practices for all the sources that may generate, use, or trade credits in the plan area.
 - (f) Either a demonstration that the use of credits under the plan does not constitute a lowering of water quality pursuant to R 323.1098(8) or (9) or a demonstration that social or economic development and the benefits to the area in which the receiving waters are located would be forgone if the use of credits is not allowed in accordance with the provisions of R 323.1098(4).
- (3) Plans listed under subrule (1) of this rule shall be approved by the department for the purposes of trading before any trading activity occurs under the plan and this part.
- (4) In addition to the plans listed under subrule (1) of this rule, any person may submit to the department for approval a comprehensive watershed management plan to conduct water quality trading for any of the following purposes:
- (a) Implementing programs or projects to improve water quality and enhance aquatic habitat.
 - (b) Reestablishing or creating wetlands or floodplains.
 - (c) Encouraging environmentally sound land use practices.
 - (d) Accommodating growth and economic development.
 - (e) Creating nature conservancies, parks, and natural areas.
 - (f) Other projects or programs included in a plan determined by the department to be consistent with water quality standards.
- (5) Watershed management plans submitted pursuant to the department under subrule (4) of this rule may be prepared by any of the following entities:
- (a) Any person living in the plan area.
 - (b) Any municipality in the area for which the plan is prepared.
 - (c) Any watershed council or other organization authorized to prepare and submit a plan on behalf of those affected in the plan area.
- (6) Watershed management plans prepared under subrule (4) of this rule shall be based on the most complete, accurate, and reliable data and information available. The plans shall include all of the following information:
- (a) A statement of the purpose of the plan.
 - (b) An identification and delineation of the boundaries of the receiving water or watershed for which the plan has been prepared and where trading may occur.
 - (c) A description of current and projected land use activities within the area for which the plan is prepared.
 - (d) An assessment of existing water quality and comparison to water quality standards for the receiving waters or watershed for which the plan is prepared.
 - (e) A pollutant-specific inventory of point and nonpoint sources in the plan area for the pollutant proposed to be traded.
 - (f) An identification of goals and priorities for implementing the plan.

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- (g) Specific activities, management options, and a schedule for implementation of the plan.
 - (h) An identification of those persons, organizations, and agencies responsible for implementation of the plan.
 - (i) A pollutant-specific cap that is consistent with achieving and maintaining water quality standards in the receiving water or watershed and that includes all point and nonpoint sources that may engage in trading.
 - (j) Point and nonpoint source baseline allocations or management practices for the generation and use of credits by all sources that may engage in trading in the plan area.
 - (k) Either a demonstration that the use of credits does not constitute a lowering of water quality pursuant to R 323.1098(8) or (9) or a demonstration that the social or economic development and the benefits to the area in which the receiving waters are located would be forgone if the use of credits is not allowed in accordance with the provisions of R 323.1098(4).
 - (l) A program to periodically assess the effectiveness of, and make revisions to, the plan.
 - (m) A process for stakeholder involvement throughout the development, implementation, and revision of the plan.
 - (n) A written agreement, and all approvals as may be required by law, from each person that is affected by or may engage in trading under the plan.
 - (7) The department shall review and approve plans for the purposes of trading that are consistent with this part, comply with applicable federal and state regulations, and which provide reasonable assurances that water quality will be achieved and maintained.
 - (8) Before approving a watershed management plan submitted under subrule (1) or (4) of this rule, the department shall provide public notice and a 30-day comment period on the watershed management plan and the department's proposed action to approve the plan. The department shall hold a public hearing if the department determines that a sufficient public controversy exists or that additional information is necessary under subrule (2) or (6) of this rule. The department shall consider all comments received during the comment period and the public hearing, if held, before taking final action to approve the plan.
 - (9) Approval or disapproval of the watershed management plan by the department shall be final.
 - (10) A watershed management plan and revisions to the plan, approved by the department, shall be effective for a period of not more than 5 years. The plan and revisions to the plan shall be binding for the purposes of trading on the department and the parties to the plan, unless the plan is withdrawn.
- History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3024 Program evaluation.

- Rule 24. (1) The department shall conduct an evaluation of the water quality trading program established under this part to assess the environmental and economic performance of the program. The first evaluation shall be conducted 3 years after the effective date of this part. The first evaluation shall include all trading activity that occurs statewide. Thereafter, watershed-specific evaluations shall be conducted every 5 years, or more frequently if deemed necessary by the department, in a receiving water or watershed where trading occurs. These watershed-specific evaluations shall be conducted during the same basin year that ambient monitoring and permitting cycles for national permits are conducted by the department. The evaluations shall include all of the following information:
- (a) Identification of the receiving water or watershed where trading has occurred. The identification shall include a delineation of the trading area, the number and mix of point and nonpoint sources in the trading area, and the status of water quality in the trading area.
 - (b) Ambient monitoring conducted by the department to quantify actual nonpoint source load reductions and assess water quality in a receiving water or watershed where trading has occurred. The department may include monitoring data and information conducted by other agencies, institutions, organizations, or persons where such monitoring has been conducted in accordance with procedures outlined in 40 C.F.R. §136 (2000), which are adopted by reference in R323.3027, or in accordance with other procedures approved by the department.
 - (c) The type and number of trades, by pollutant, for each watershed where trading occurs.
 - (d) The quantity of credits that have been traded.
 - (e) The quantity of discharge or load reductions that have been retired.
 - (f) A comparison of the cost of reducing pollutant discharges and loadings through trading to the cost of achieving equivalent reductions without trading, where adequate information for point and nonpoint sources is available.
 - (g) The price paid for credits that are used or traded, by pollutant.
 - (h) The costs incurred by the department to administer, monitor, and enforce the program.
 - (i) The transaction costs incurred by point and nonpoint sources that participate in the program where such information is available.
- (2) The department shall evaluate the information provided under subrule (1) of this rule to make the following determinations:
- (a) Whether the program is consistent with achieving and maintaining water quality standards in the receiving waters or

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watersheds where trading has occurred.

(b) Whether water quality trading has resulted in a net reduction in the loadings of pollutants from point and nonpoint sources that have engaged in trading.

(c) Whether the program has achieved voluntary and early reductions of pollutant discharges and loadings from point and nonpoint sources and whether the program has resulted in the development of emerging pollution control technology or new or improved methods and procedures for the quantification of point and nonpoint source discharges.

(d) Whether the program has caused any localized adverse effects to the public health, safety, welfare, or environment.

(e) Whether monitoring, recordkeeping, reporting, and enforcement provisions of the program have resulted in a sufficiently high level of accountability and compliance.

(3) The department shall prepare and make available to the public a report of the program evaluation conducted pursuant to subrules (1) and (2) of this rule. The report shall include the findings of the evaluation and any proposed program modifications deemed necessary by the department to assure all of the following:

(a) Trading occurs in a manner that is consistent with water quality standards.

(b) Localized adverse impacts to the public health, safety, welfare, or environment do not occur as a result of the use of credits.

(c) Trading results in a net water quality improvement.

(d) To improve the environmental or economic performance of the program.

(4) The department shall provide a public notice and a 30-day comment period and opportunity for public hearing before finalizing the findings contained in the report and any proposed program modifications pursuant to subrule (3) of this rule. The department shall hold a public hearing if the department determines that a sufficient public controversy exists or if additional information is desired before action by the department. The department shall consider all comments received during the comment period and public hearing, if held, before finalizing the findings contained in the report and any proposed program modifications.

(5) The department shall, after public notice, comment, and opportunity for hearing, modify the program as necessary to achieve the purposes established in R 323.3002.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3025 Compliance and enforcement.

Rule 25. (1) Notwithstanding another person's liability, negligence, or false representation, a person or source that uses credits under this part shall be solely responsible to assure that any source, process, equipment, property, and operation under his or her ownership or control is in compliance with all applicable discharge standards and effluent limitations. A person or source that generates discharge or load reductions and registers credits that are traded or used under this part shall be strictly liable for assuring that the reductions are real, surplus, quantifiable, and equal to the quantity of credits that are registered.

(2) A person or source at any time may provide written notice to the department that the quantity of discharge or load reductions actually generated or the quantity of credits used or traded are not real, surplus, quantifiable, or are insufficient for the purpose they are registered. A person or source that provides a notice of insufficient reductions or credits without first having been notified by the department shall be provided a reconciliation period of not more than 30 days to true-up the insufficient reductions or credits if all of the following conditions are met:

(a) The notice of insufficient reductions or credits is submitted by certified mail to the department within 7 days of the discovery that the reductions or credits are insufficient or are not real, surplus, or quantifiable.

(b) The notice of insufficient reductions or credits submitted pursuant to subrule (2)(a) of this rule shall include all of the following information:

(i) A detailed description and explanation of how, and the date when, the insufficient reductions or credits were discovered.

(ii) A statement of the corrective actions taken or to be taken, and the time when the actions were completed or a schedule describing when the actions will be taken and completed.

(iii) A revised notice and certification of discharge or load reduction generation or credit use, whichever is applicable.

(iv) Certification by a responsible individual that, to the best of the individual's knowledge, the information in the notice of insufficient reductions or credits is true, accurate, and complete.

(c) Upon submitting the notice of insufficient reductions or credits, the person submitting the notice shall also do either of the following, as applicable:

(i) If insufficient credits are registered and have been traded or are being used, then the person or source submitting the notice shall, within 30 days, implement and register discharge or load reductions or obtain credits from another person or source to true-up the quantity of discharge or load reductions or credits that were insufficient or were not real, surplus, or quantifiable.

(ii) If the credits have not been used or traded, then the person or source submitting the notice of insufficient reductions shall contemporaneously submit either of the following:

(A) A revised notice of generation of discharge or load reductions.

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(B) A written request for the department to withdraw the credits from the water quality trading registry.

(3) If the department finds, without being provided notice pursuant to subrule (2) of this rule, that a person or source has registered a quantity of reductions that are not real, surplus, or quantifiable, or that the quantity of reductions and resulting credits is less than the quantity that have been used or traded then, the person or source who generated the insufficient reductions and registered credits shall generate or obtain, and donate credits to the department in an amount equal to treble the number of insufficient reductions and credits that are not real, surplus, or quantifiable. Discharge and load reductions generated and credits donated to the department under this subrule shall be retired to provide a water quality benefit.

(4) A person or source that is granted a reconciliation period under subrule (2) of this rule and who complies with the requirements of subrule (2) of this rule and has not violated other provisions of this part shall be considered to be in compliance with this part.

(5) If the department determines that a person or source has violated the provisions of the act or a provision of a permit, order, rule, or stipulation of the department, then the department may take appropriate enforcement action as provided under the act and this part. In any such enforcement proceeding, a person or source that generates reductions and registers credits shall have the burden of proof that the reductions generated and credits registered are real, surplus, quantifiable, and sufficient. A person who uses credits under this part shall have the burden of proof of due diligence to comply with all applicable discharge standards and effluent limitations established by an applicable requirement and to comply with the requirements of this part.

(6) Notwithstanding other provisions of this rule, a source that uses credits that are later determined not to be real, surplus, quantifiable, or sufficient shall have a reconciliation period of 90 days to true-up the quantity of credits that were determined not to be real, surplus, quantifiable, or sufficient. The reconciliation period shall begin on the date of discovery by the source or the date of a written notification from the department, whichever is first. A source or person that knows, or should have known, that the credits used were not real, surplus, quantifiable, and sufficient shall not be entitled to the reconciliation period provided under this subrule.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3026 Availability of documents

Rule 26 (1) The following documents referenced in this part are adopted by reference and are available for inspection at, and may be obtained at the cost as of the time of adoption of these rules of 5 cents per page and a labor rate of \$19.78 per hour from, the Lansing office of the Department of environmental quality, 525 Allegan Street, P.O. Box 30273, Lansing, Michigan 48909-7773:

(a) "Pollutants Controlled Calculation and Documentation," Michigan Department of environmental quality, 1999.

(b) The United States Department of Agriculture, Natural Resource Conservation Service, Field Office Technical Guide for Michigan, Section I-c. Water Erosion Prediction, 1982.

(c) Great Lakes Water Quality Agreement of 1978, as amended.

History: 2002 MR 21, Eff. Nov. 22, 2002.

R 323.3027 Availability of federal regulations:

Rule 27 (1) The following sections of the code of federal regulations referenced in this part are adopted by reference and are available for inspection at, and may be obtained from, the Lansing office of the Department of environmental quality, 525 Allegan Street, P.O. Box 30273, Lansing, Michigan 48909-7773 at the cost as of the time of adoption of these rules of 5 cents per page and a labor rate of \$19.78 per hour. Copies may also be obtained via the internet at <http://www.access.gpo.gov/nara> or from the Superintendent of Documents, Government Printing Office, Washington, DC 20402. The costs for orders from the government printing office as of the time of adoption of these rules are as follows:

(a) 40 C.F.R. 25 (2000), public participation requirements for RCRA, safe drinking water act and clean water act. \$54.00.

(b) 40 C.F.R. 117 (2000), determination of reportable quantities for hazardous substances. \$38.00.

(c) 40 C.F.R. 121 (2000), state certification of activities requiring a federal license or permit. \$38.00.

(d) 40 C.F.R. 122 (2000), EPA administered permit programs: the national pollutant discharge elimination system. \$38.00

(e) 40 C.F.R. 123 (2000), state program requirements. \$38.00.

(f) 40 C.F.R. 124 (2000), procedures for decisionmaking. \$38.00.

(g) 40 C.F.R. 125 (2000), criteria and standards for the national pollutant discharge elimination system. \$38.00.

(h) 40 C.F.R. 129 (2000), toxic pollutant effluent standards. \$38.00.

(i) 40 C.F.R. 130 (2000), water quality planning and management. \$38.00.

(j) 40 C.F.R. 131 (2000), water quality standards. \$38.00.

(k) 40 C.F.R. 132 (2000), water quality guidance for the Great Lakes system. \$38.00.

(l) 40 C.F.R. 133 (2000), secondary treatment regulation. \$38.00.

(m) 40 C.F.R. 135 (2000), prior notice of citizen suits. \$38.00.

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- (n) 40 C.F.R. 136 (2000), guidelines establishing test procedures for the analysis of pollutants. \$55.00.
 - (o) 40 C.F.R. 140 (2000), marine sanitation device standard. \$55.00.
 - (p) 40 C.F.R. 401-424 (2000), subchapter n - effluent guidelines and standards. \$51.00.
 - (q) 40 C.F.R. 471 (2000), nonferrous metals forming and metal powders point source category. \$55.00.
 - (r) 40 C.F.R. 501-503 (2000), subchapter o - sewage sludge. \$55.00.
- History: 2002 MR 21, Eff. Nov. 22, 2002.

GEOLOGICAL SURVEY DIVISION

OIL AND GAS OPERATIONS

PART 1. GENERAL PROVISIONS

R 324.101

Source: 1996 AACS.

R 324.102 Definitions; A to M.

Rule 102. As used in these rules:

- (a) "Act" means 1994 PA 451, MCL 324.101 et seq.
- (b) "ANSI" means the American national standards institute.
- (c) "API" means the American petroleum institute.
- (d) "Authorized representative of the supervisor" means a department of environmental quality employee who is charged with the responsibility for implementation of the act or these rules.
- (e) "Blowout prevention equipment" means a casinghead control device designed to control the flow of fluids from the well bore by closing around the drill pipe or production tubing or completely sealing the hole in the absence of drill pipe or production tubing.
- (f) "Brine" means all nonpotable water resulting, obtained, or produced from the exploration, drilling, or production of oil or gas, or both.
- (g) "Central production facility" means production equipment which has been consolidated at a central location that provides for the commingling of oil or gas production, or both, from 2 or more wells or production units of diverse ownership or from 2 or more prorated wells or production units.
- (h) "Conformance bond" means a surety bond that has been executed by a surety company authorized to do business in the state of Michigan, cash, certificates of deposit, letters of credit, or other securities that are filed by a person and accepted by the supervisor to ensure compliance with the act, these rules, permit conditions, instructions, orders of the supervisor, or an order of the department of environmental quality.
- (i) "Development well" means a well which has as its objective an oil or gas pool known to be, or have been, productive through the discovery well of the oil or gas pool and which is located either within a 2-mile radius of the discovery well or on the same structure as the discovery well.
- (j) "Directionally drilled well" means a well purposely deviated from the vertical using controlled angles to reach an objective location.
- (k) "Discovery well" means a well that discovers a new and previously untapped oil or gas pool. A discovery well may open up a new field or it may locate a previously unknown oil or gas pool in an old field.
- (l) "Drilling completion" means the time when a well has reached its permitted depth or the supervisor has determined drilling has ceased.
- (m) "Drilling operations" means all of the physical and mechanical aspects of constructing a well for the exploration or production of oil or gas, or both, for injection of fluids associated with the production of oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas, and includes all of the following:
 - (i) Moving drilling equipment onto the drill site.
 - (ii) Penetration of the ground by the drill bit and drilling of the well bore.
 - (iii) Casing and sealing of the well bore.
 - (iv) Construction of well sites and access roads.
- (n) "Drilling unit" means the area prescribed by an applicable well spacing rule or order for the granting of a permit for the drilling and operation of an oil or gas well, or both.
- (o) "Facility piping" means piping that connects any of the following:
 - (i) Compressors.
 - (ii) Flares.

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- (iii) Loadouts.
 - (iv) Separators.
 - (v) Storage tanks.
 - (vi) Transfer pumps.
 - (vii) Treatment equipment.
 - (viii) Vents.
 - (p) "Fence" means a structure which is designed to deter access and which consists of not less than 2 strands of barbed wire, 1 strand being approximately 18 inches above the ground and the other strand being approximately 42 inches above the ground, secured to supporting posts or means an equivalent structure that deters access.
 - (q) "Final completion" means the time when locating, drilling, deepening, converting, operating, producing, reworking, plugging, and proper site restoration have been performed on a well in a manner approved by the supervisor, including the filing of the mandatory records, and when the conformance bond has been released.
 - (r) "Flow line" means piping that connects a well or wells to a surface facility.
 - (s) "Fresh water" means water which is free of contamination in concentrations that may cause disease or harmful physiological effects and which is safe for human consumption.
 - (t) "Gas storage" means the use of a depleted oil or gas pool, salt cavern, or other porous strata utilized for the purpose of injecting and withdrawing gas from the depleted oil or gas pool, salt cavern, or other porous strata.
 - (u) "Gathering line" means a pipeline that transports natural gas from a surface facility to a transmission pipeline.
 - (v) "Geologist" means a person who is certified as a geologist by a credible geological professional association or who, by reason of his or her knowledge of the natural sciences, mathematics, and the principles of geology acquired by professional education and practical experience, is qualified to engage in the practice of the science of geology.
 - (w) "Groundwater" means water below the land surface in the zone of saturation.
 - (x) "Injection well" means a well used to dispose of, into underground strata, waste fluids produced incidental to oil and gas operations or a well used to inject water, gas, air, brine, or other fluids for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir or for the storage of hydrocarbons.
 - (y) "Instruction" means a written statement of general applicability which is issued by the supervisor, which conforms with the act and rules promulgated under the act, and which clarifies or explains the applicability of the act or rules to commonly recurring facts or circumstances.
 - (z) "Multiple zone completion" means a well constructed and operated to separately produce oil or gas, or both, from more than 1 reservoir through 1 well bore.
- History: 1996 MR 9, Eff. Sep. 19, 1996; 2001 MR 2, Eff. Feb. 6, 2001; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.103 Definitions; N to Z.

Rule 103. As used in these rules:

- (a) "Nuisance odor" means an emission of any gas, vapor, fume, or mist, or combination thereof, from a well or its associated surface facilities, in whatever quantities, that causes, either alone or in reaction with other air contaminants, injurious effects to human health or safety; unreasonable injurious effects to animal life, plant life of significant value, or property; or unreasonable interference with the comfortable enjoyment of life or property.
- (b) "Oil and gas operations" means permitting activities required under R 324.201, drilling operations, well completion operations, operation of oil and gas wells, plugging operations, and site restoration.
- (c) "Operation of oil and gas wells" means the process of producing oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas, including all of the following:
 - (i) Production, pumping, and flowing.
 - (ii) Processing.
 - (iii) Gathering.
 - (iv) Compressing.
 - (v) Treating.
 - (vi) Transporting.
 - (vii) Conditioning.
 - (viii) Brine removal and disposal.
 - (ix) Separating.
 - (x) Storing.
 - (xi) Injecting.
 - (xii) Testing.
 - (xiii) Reporting.
 - (xiv) Maintenance and use of surface facilities.

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- (xv) Secondary recovery.
- (d) "Organization report" means a listing of all corporate officers, directors, incorporators, partners, or shareholders who have the authority to make, or are responsible for making, operational decisions, including the siting, drilling, operating, producing, reworking, and plugging of wells.
- (e) "Permit" means a permit to drill and operate an oil or gas well, or both, or an injection well, including associated surface facilities and flow lines.
- (f) "Plugging operations" means the sealing of the fluids in the strata penetrated by an oil or gas well, or both, upon abandonment of the well or a portion of the well bore, so that the fluid from one stratum will not escape into another or to the surface.
- (g) "Ppm" means parts per million by volume.
- (h) "Psi" means pounds per square inch.
- (i) "Psig" means pounds per square inch gauge.
- (j) "Secondary recovery" means the introduction or utilization of fluid or energy into or within a pool for the purpose of increasing the ultimate recovery of hydrocarbons from the pool.
- (k) "Shut-in" means an action by a permittee to close down a producing well, a well capable of producing, or an injection well temporarily for any of the following reasons:
 - (i) Repair.
 - (ii) Cleaning out.
 - (iii) Building up reservoir pressure.
 - (iv) Planning for secondary recovery.
 - (v) Other injection projects.
 - (vi) While awaiting connection of a sales line.
 - (vii) Lack of a market.
- (l) "Site restoration" means all of the following:
 - (i) The filling and leveling of all cellars, pits, and excavations.
 - (ii) The removal or elimination of all debris.
 - (iii) The elimination of all conditions that may create a fire or pollution hazard.
 - (iv) The minimization of erosion.
 - (v) The restoration of the well site as nearly as practicable to the original land contour or to a condition approved by the supervisor.
- (m) "Structure used for public or private occupancy" means a residential dwelling or place of business, place of worship, school, hospital, government building, or other building where people are usually present at least 4 hours per day.
- (n) "Supervisor" means the director of the department of environmental quality or his or her assistants as approved by the director of the department of environmental quality.
- (o) "Surface casing" means the casing string or strings used primarily for protecting fresh water or mineralized water resources from potential contamination during the drilling and operation of an oil or gas well, or both.
- (p) "Surface facility" means a facility used in the injection of fluids or in the production, processing, or treatment of oil or gas, or both, including any of the following:
 - (i) Pumping equipment.
 - (ii) Fluid disposal equipment.
 - (iii) Facility piping.
 - (iv) Load outs.
 - (v) Separators.
 - (vi) Storage tanks.
 - (vii) Treatment equipment.
 - (viii) Compressors.
- (q) "Surface water" means a body of water, and the associated sediments, which has a top surface that is exposed to the atmosphere and which is not solely for wastewater conveyance, treatment, or control. Surface water may be any of the following:
 - (i) A Great Lake or its connecting waters.
 - (ii) An inland lake or pond.
 - (iii) A river or stream, including intermittent streams.
 - (iv) An impoundment.
 - (v) An open drain.
 - (vi) A wetland.
- (r) "Well completion" means the time when a well has been tested and found to be incapable of producing hydrocarbons in

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commercial quantities and has been plugged or has been found capable of producing commercial quantities of hydrocarbons or when the well has been equipped to perform the service for which it was intended.

(s) "Well completion operations" means work performed in an oil or gas well, or both, after the well has been drilled to its permitted depth and the production string of casing has been set, including perforating, artificial stimulation, and production testing.

(t) "Well location" means the surface location of a well.

(u) "Zoned residential" means a geographic area that was zoned by a local unit of government before January 8, 1993, as an area designated principally for permanent or recreational residences.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.104

Source: 1996 AACCS.

R 324.199

Source: 1996 AACCS.

PART 2. PERMITS TO DRILL AND OPERATE

R 324.201

Source: 1996 AACCS.

R 324.202 Directional redrilling.

Rule 202. (1) A permittee of a well who desires to directionally redrill an existing well to a different bottom hole location shall file an application for a new permit. The application shall set forth, in detail, the new bottom hole location and identify the plug-back depth of the existing well and shall be filed under R 324.201(3). The directional redrilling shall not be commenced until the application has been approved by the supervisor or authorized representative of the supervisor, except as provided in subrule (2) of this rule. A new permit and an additional fee shall be required.

(2) A permittee of a well who desires to directionally redrill an existing permitted drilling well to a different bottom hole location with the drilling rig then on location shall obtain approval from the supervisor or authorized representative of the supervisor. Approval to redrill shall be obtained by contacting the authorized representative of the supervisor in person or by telephone and providing pertinent details of the proposed directional redrilling. Approval may be granted immediately if all of the following provisions are complied with:

(a) The existing drilled hole is plugged back before starting the new directional hole under the provisions of these rules.

(b) The new bottom hole location conforms to applicable spacing.

(c) The well has adequate bonding or a statement of financial responsibility has been filed under R 324.210.

(3) If approval to directionally redrill is granted, a permittee of a well shall obtain a new permit and pay an additional fee. The application for a new permit and additional fee shall be filed within 10 days at the offices of the Michigan Department of Environmental Quality, Geological and Land Management Division, P.O. Box 30256, Lansing, Michigan 48909. In addition to other enforcement actions, failure to comply with this subrule shall be cause for immediate suspension of any or all components of the oil and gas operations on the well.

(4) A well log and plugging record shall be filed on the plugged-back hole under these rules.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.203 Lost holes.

Rule 203. (1) A permittee of a well shall obtain approval to skid a rig or move to start a new hole when a hole has been lost. A new permit or additional fee is not required if the new location for the well is within 165 feet of the lost hole and the drilling unit is not changed.

(2) A permittee of a well may obtain approval for skidding a rig or moving to a new location for the well because of a lost hole from the authorized representative of the supervisor in person or by telephone. Approval may be granted immediately if all of the following provisions are complied with:

(a) The lost hole shall be plugged before starting the replacement hole under the provisions of these rules.

(b) The new location for the well shall be made at a safe distance from the lost hole.

(c) The new bottom hole location shall conform to applicable spacing.

(d) The new location for the well shall not create surface waste.

(e) An amended application with corrected attachments and supplements shall be filed within 5 business days at the offices of the Michigan Department of Environmental Quality, Geological and Land Management Division, P.O. Box 30256, Lansing,

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Michigan 48909. In addition to other enforcement actions, failure to comply with this subrule shall be cause for suspension of any or all components of the oil and gas operations on the well.

(f) A well log and well plugging record shall be filed on all lost holes under the provisions of these rules.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.204

Source: 1996 AACS.

R 324.205

Source: 1996 AACS.

R 324.206

Source: 1996 AACS.

R 324.207 Suspension of oil and gas operations due to failure to transfer permit.

Rule 207. If a permittee of a well conveys his or her rights as an owner of a well to another person, or ceases to be the authorized representative of the owner of a well, and a request for transfer of the permit under R 324.206(6) has not been approved, then, in addition to other enforcement actions, failure to comply shall be cause for immediate suspension of any or all components of the oil and gas operations on the well, including the removal or sale of oil, gas, or brine.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.208

Source: 1996 AACS.

R 324.209

Source: 1996 AACS.

R 324.210 Conformance bond or statement of financial responsibility requirements.

Rule 210. (1) A person who files an application for a permit to drill and operate a well under R 324.201, or who acquires a well under R 324.206(6), shall file a conformance bond with the supervisor on a form prescribed by the supervisor or shall submit a statement of financial responsibility under subrule (2) of this rule.

(2) A statement of financial responsibility shall consist of all of the following:

(a) A written statement which is signed by the person, which lists data that show that the person meets the criteria specified in subrule (3) of this rule, and which states that the data are derived from an independently audited year-end financial statement.

(b) A copy of an independent certified public accountant's report on examination of the person's financial statements for the latest completed fiscal year.

(c) A special report from the person's independent certified public accountant stating that the accountant has compared the data listed in the statement provided under subdivision (a) of this subrule with the amounts in the corresponding year-end financial

statement and that nothing came to the attention of the accountant which caused the accountant to believe that the financial records should be adjusted.

(3) When a person submits a statement of financial responsibility instead of a conformance bond, a person shall meet the criteria of either subdivision (a) or (b) of this subrule, as follows:

(a) A person required to file the statement of financial responsibility shall have all of the following:

(i) Two of the following 3 ratios:

(A) A ratio of total liabilities to net worth of less than 2.0.

(B) A ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities of more than 0.1.

(C) A ratio of current assets to current liabilities of more than 1.5. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.

(ii) Net working capital and tangible net worth each of which is not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond.

(iii) Total assets in Michigan that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.

(iv) A written statement from a certified public accountant which states that no matter came to the attention of the accountant which caused him or her to believe that the financial records should be adjusted.

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(b) A person required to file a statement of financial responsibility shall have all of the following:

(i) A current rating for his or her most recent bond issuance of Aaa, Aa, A, or Bbb as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's.

(ii) A tangible net worth of not less than \$2,000,000.00.

(iii) Total assets in Michigan that are not less than 3 times the amount of the conformance bond provided in R 324.212, if the person had elected to file a conformance bond. Projected oil and gas reserves may be utilized in determining current assets only to the extent that the value of the reserves exceeds the projected costs of development and production.

(4) A person shall submit a statement of financial responsibility to the supervisor not less than 60 days before the date the financial assurance is scheduled to take effect.

(5) After the initial submission of a statement of financial responsibility, the person shall send an updated statement of financial responsibility to the supervisor within 90 days after the close of each succeeding fiscal year.

(6) If a person no longer meets the requirements of subrule (3) of this rule, he or she shall send notice to the supervisor of the intent to establish alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule. The notice shall be sent, by certified mail, within 90 days after the end of the fiscal year for which the year-end review of the financial records shows that the person no longer meets the requirements. The person shall provide the alternate financial assurance within 120 days after the end of the fiscal year.

(7) The supervisor may, based on a reasonable belief that the person no longer meets the requirements of subrule (3) of this rule, require a report at any time from the person in addition to the information required by subrule (3) of this rule. If the supervisor finds, on the basis of a review of the report or other information, that the person no longer meets the requirements of subrule (3) of this rule, then the supervisor or authorized representative of the supervisor shall notify and inform the person. Within 30 days of the notification, the person shall provide alternate financial assurance by filing a conformance bond as specified in subrule (1) of this rule or shall bring the well to final completion. Failure to comply with this subrule shall be cause for immediate suspension of any or all components of the oil and gas operations on the well.

(8) The supervisor may require additional conformance bonds to ensure compliance with orders of the supervisor, excluding proration, compulsory pooling, or spacing orders. The conformance bond shall be in addition to the conformance bonds filed under R 324.212(a), (b), or (c) and shall be required only if the supervisor determines that the existing conformance bond is not adequate to cover the estimated cost of plugging the well and conducting site restoration or other obligations of the permittee under the order. A person is not required to file additional conformance bonds under this subrule if the person has filed a blanket conformance bond or bonds in an aggregate amount of \$250,000.00 or more, under R 324.212(d). Subject to the provisions of R 324.213, the additional conformance bond shall be released when the permittee has complied with all provisions of the orders of the supervisor.

(9) Conformance bonds that were in effect before the effective date of these rules shall remain in effect under the conditions upon which they were filed and accepted by the supervisor. However, in place of conformance bonds that were in effect before the effective date of these rules, a permittee may file conformance bonds or submit a statement of financial responsibility under these rules for wells permitted under the act before the effective date of these rules.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.211 Liability on conformance bond.

Rule 211. (1) The liability on the conformance bond is conditioned upon compliance with the act, these rules, permit conditions, instructions, or orders of the supervisor. Subject to the provisions in R 324.213, liability shall cover all oil and gas operations of the permittee as follows:

(a) Through transfer of the permit for the subject well under R 324.206(6).

(b) Through final completion approved by the supervisor of the subject well.

(c) Otherwise as approved by the supervisor.

(2) The supervisor shall look to the conformance bond for immediate compliance with, and fulfillment of, the full conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor. All expenses incurred by the supervisor in achieving compliance with, and fulfillment of, all conditions of the act, these rules, permit conditions, instructions, or orders of the supervisor shall be paid by the permittee or the surety or from cash or securities on deposit. The claim shall be paid within 30 days of notification to the permittee or surety that expenses have been incurred by the supervisor. If the claim is not paid within 30 days, the supervisor, acting for and on behalf of the state, may bring suit for the payment of the claim.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.212

Source: 1996 AACs.

R 324.213 Cancellation of conformance bonds issued by a surety.

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Rule 213. (1) A surety company may cancel a conformance bond acquired under these rules upon 90 days' notice to the supervisor of the effective date of cancellation. However, the surety company shall retain liability for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred during the time the conformance bond was in effect.

(2) Forty days before the effective date of cancellation, as provided in subrule (1) of this rule, a permittee shall secure a conformance bond from another surety company authorized to do business in the state of Michigan, deposit cash or other securities, or bring the well to final completion. Failure to comply with this subrule shall be cause for the immediate suspension of any or all components of the oil and gas operations on the well.

(3) A surety company shall remain liable until the violations have been corrected and the corrections are accepted by the supervisor for all violations of the act, these rules, permit conditions, instructions, or orders of the supervisor that occurred at the well during the time the conformance bond was in effect before the effective date of cancellation.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.214

Source: 1996 AACS.

R 324.215

Source: 1996 AACS.

R 324.216

Source: 1996 AACS.

PART 3. SPACING AND LOCATION OF WELLS

R 324.301

Source: 1996 AACS.

R 324.302

Source: 1996 AACS.

R 324.303

Source: 1996 AACS.

R 324.304

Source: 1996 AACS.

PART 4. DRILLING AND WELL CONSTRUCTION

R 324.401

Source: 1996 AACS.

R 324.402

Source: 1996 AACS.

R 324.403

Source: 1996 AACS.

R 324.404

Source: 1996 AACS.

R 324.405

Source: 1996 AACS.

R 324.406

Source: 1996 AACS.

R 324.407

Source: 1996 AACS.

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R 324.408
Source: 1996 AACS.

R 324.409
Source: 1996 AACS.

R 324.410
Source: 1996 AACS.

R 324.411
Source: 1996 AACS.

R 324.412
Source: 1996 AACS.

R 324.413
Source: 1996 AACS.

R 324.414
Source: 1996 AACS.

R 324.415
Source: 1996 AACS.

R 324.416
Source: 2001 AACS.

R 324.417
Source: 1996 AACS.

R 324.418
Source: 1996 AACS.

R 324.419
Source: 1996 AACS.

R 324.420
Source: 1996 AACS.

R 324.421
Source: 1996 AACS.

R 324.422
Source: 1996 AACS.

PART 5. COMPLETION AND OPERATION

R 324.501 Responsibility for oil and gas operations.

Rule 501. A permittee of a well is responsible for the oil and gas operations of his or her well.
History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.502
Source: 1996 AACS.

R 324.503
Source: 1996 AACS.

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R 324.504 Well sites and surface facilities.

Rule 504. (1) A person shall use every reasonable precaution to stop and prevent waste. All wells, surface facilities, gathering lines, and flow lines shall be constructed and operated so that the materials contained in the facilities do not cause waste. An oil and gas operation shall not be commenced or continued at a location where it is likely that a substance may escape in a quantity sufficient to pollute the air, soil, surface waters, or groundwaters or to cause unnecessary endangerment of public health, safety, or welfare until the permittee has complied with the methods and means to prevent pollution or eliminate the unnecessary endangerment of public health, safety, or welfare as specified by the supervisor.

(2) The surface facilities shall be located not less than 300 feet from all of the following:

(a) Existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption.

(b) Existing structures used for public or private occupancy.

(c) Existing areas maintained for public recreation.

(d) The edge of the traveled portion of an existing interstate, United States, or state highway. Pump jacks are exempt from this requirement.

(3) Surface facilities may be located closer than 300 feet from existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption and existing structures used for public or private occupancy under either of the following conditions:

(a) Upon presentation to the supervisor of a written consent signed by the owner or owners of all existing recorded freshwater wells and reasonably identifiable freshwater wells utilized for human consumption and existing structures used for public or private occupancy.

(b) After a hearing under part 12 of these rules, the supervisor determines that the surface facility location will prevent waste, protect environmental values, and not compromise public safety.

(4) A permittee of a well shall not begin the installation of a surface facility or flow line without approval of the supervisor or authorized representative of the supervisor. A permittee shall make a written request for approval to construct and operate or to substantially reconstruct and operate a surface facility or flow line and shall file the request with the supervisor. The request may be filed with the application for a permit to drill and operate a well. The request shall have a detailed description and plan of the proposed facility, which shall include all of the following information:

(a) An environmental impact assessment if the surface facility is located more than 300 feet from the well or wells it serves.

(b) The location of the proposed surface facility or flow line.

(c) Identification of the well or wells to be connected to the surface facility or flow line.

(d) Reasonable and necessary measures to protect environmental values associated with existing adjacent land uses, including berming, screening, and access road location.

(e) Information relative to the approximate distances and directions from the surface facility or flow line to special hazards or conditions identified in R 324.201(2)(b)(iv).

(5) Upon receipt of a written request for approval to construct and operate or to substantially reconstruct and operate a surface facility or flow line under subrule (4) of this rule, other than a request to construct and operate a surface facility or flow line made as part of an application for permit to drill and operate a well, the supervisor or authorized representative of the supervisor shall have up to 30 days to review the request to determine if the request is accurate and complete. If the request is determined to be inaccurate or incomplete, the supervisor or authorized representative of the supervisor shall provide, within the 30-day period, to the person making the request, a notice that the request is inaccurate or incomplete and what changes or additional information shall be submitted. Upon receipt of the requested information, the supervisor or authorized representative of the supervisor shall have up to an additional 15 days to review the information to determine if the request is accurate and complete. Upon completion of the review process, the supervisor or authorized representative of the supervisor shall approve or deny the request within 10 business days. A request shall be approved if the supervisor determines that construction and operation of the proposed surface facility or flow line will prevent waste, protect environmental values, and not compromise public safety. Upon approval by the supervisor or authorized representative of the supervisor, a request made under this rule shall become part of, and subject to, the provisions of the permit to drill and operate the well or wells served by the surface facility.

(6) A person or permittee of a well shall not install a gathering line, carrying gas with more than 300 ppm hydrogen sulfide or a flow line or facility piping carrying gas from a class I H₂S well and that is subject to a maximum working pressure of more than 125 psig that does not meet the construction requirements in R 324.1130.

(7) Surface facilities constructed after November 15, 1989, shall have secondary containment under R 324.1002.

(8) If discharges to the air, surface waters, or groundwater of the state are likely to occur at a surface facility, then a permittee shall apply for and obtain all necessary state and federal discharge permits before operating the surface facility.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2001 MR 2, Eff. Feb. 6, 2001; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.505

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Source: 1996 AACS.

R 324.506

Source: 1996 AACS.

R 324.507

Source: 1996 AACS.

R 324.508

Source: 1996 AACS.

R 324.509

Source: 1996 AACS.

R 324.510

Source: 1996 AACS.

R 324.511 Change of well status.

Rule 511. (1) A permittee of a well who desires to change the status of a well by an oil and gas operation, including temporary abandonment, except as allowed by R 324.704, and additional acid or other stimulation treatment, shall file an application for change of well status with the supervisor. The application shall set forth, in detail, the kind of oil and gas operation to be accomplished and the plan for protecting all oil, gas, brine, or fresh water strata the well has penetrated. A permittee shall not begin the oil and gas operation until he or she has received approval from the supervisor or authorized representative of the supervisor and provided notification to the supervisor or authorized representative of the supervisor of the date the oil and gas operation will commence.

(2) A permittee of a well who changes the status of a well shall file, with the supervisor, within 60 days, a complete change of well status record on forms prescribed by the supervisor, except that a record shall not be filed when the change of well status operation is for temporary abandonment purposes.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

PART 6. PRODUCTION AND PRORATION

R 324.601

Source: 1996 AACS.

R 324.602

Source: 1996 AACS.

R 324.603

Source: 1996 AACS.

R 324.604

Source: 1996 AACS.

R 324.605

Source: 1996 AACS.

R 324.606

Source: 1996 AACS.

R 324.607

Source: 1996 AACS.

R 324.608

Source: 1996 AACS.

R 324.609

Source: 1996 AACS.

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R 324.610
Source: 1996 AACS.

R 324.611
Source: 1996 AACS.

R 324.612
Source: 1996 AACS.

R 324.613
Source: 1996 AACS.

PART 7. DISPOSAL OF OIL OR GAS FIELD WASTE, OR BOTH

R 324.701
Source: 1996 AACS.

R 324.702
Source: 1996 AACS.

R 324.703
Source: 1996 AACS.

R 324.704
Source: 1996 AACS.

R 324.705
Source: 1996 AACS.

PART 8. INJECTION WELLS

R 324.801
Source: 1996 AACS.

R 324.802
Source: 1996 AACS.

R 324.803
Source: 1996 AACS.

R 324.804
Source: 1996 AACS.

R 324.805
Source: 1996 AACS.

R 324.806
Source: 1996 AACS.

R 324.807
Source: 1996 AACS.

R 324.808
Source: 1996 AACS.

PART 9. PLUGGING

R 324.901

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Source: 1996 AACS.

R 324.902

Source: 1996 AACS.

R 324.903

Source: 1996 AACS.

R 324.904

Source: 1996 AACS.

**PART 10. WELL SITES AND SURFACE FACILITIES; PREVENTION OF FIRES, POLLUTION, AND DANGER
TO, OR DESTRUCTION OF, PROPERTY OR LIFE**

R 324.1001

Source: 1996 AACS.

R 324.1002

Source: 1996 AACS.

R 324.1003

Source: 1996 AACS.

R 324.1004

Source: 1996 AACS.

R 324.1005

Source: 1996 AACS.

R 324.1006

Source: 1996 AACS.

R 324.1007

Source: 1996 AACS.

R 324.1008

Source: 2001 AACS.

R 324.1009

Source: 1996 AACS.

R 324.1010

Source: 1996 AACS.

R 324.1011

Source: 1996 AACS.

R 324.1008

Source: 2001 AACS.

R 324.1012

Source: 1996 AACS.

R 324.1014 Suspension of oil and gas operations due to threat to public health and safety.

Rule 1014. (1) The supervisor or authorized representative of the supervisor shall have the authority to immediately require corrective action, including suspending any or all components of the oil and gas operations, if the oil and gas operations have been determined by the supervisor to be in violation of the provisions of the act, these rules, permit conditions, instructions, or orders of the supervisor and threatens the public health and safety.

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(2) A suspension of oil and gas operations shall be in effect for not more than 5 days or until the operation is in compliance and protection of the public health and safety is ensured. To extend the suspension beyond 5 days, the supervisor shall issue an emergency order to continue the suspension of oil and gas operations and may schedule a hearing under part 12 of these rules. The total duration of the suspension of oil and gas operations shall not be more than 21 days, as provided in section 61516 of the act.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.1015

Source: 1996 AACS.

R 324.1016

Source: 1996 AACS.

PART 11. HYDROGEN SULFIDE MANAGEMENT

R 324.1101

Source: 1996 AACS.

R 324.1102

Source: 1996 AACS.

R 324.1103

Source: 2001 AACS.

R 324.1104

Source: 1996 AACS.

R 324.1105

Source: 2001 AACS.

R 324.1106

Source: 1996 AACS.

R 324.1107 Training.

Rule 1107. (1) A permittee of a well is responsible for ensuring that all agents, employees, or other representatives of the permittee who are involved in drilling, completing, testing, producing, repair, workover, or servicing operations on an H₂S well have received training from persons qualified in hydrogen sulfide safety. The training shall include all of the following matters:

- (a) The physical properties and physiological effects of hydrogen sulfide.
 - (b) The effects of hydrogen sulfide on metals and elastomers.
 - (c) Emergency escape procedures.
 - (d) The location and proper use of safety equipment.
 - (e) The locations of primary and secondary briefing areas.
 - (f) The location and operation of the hydrogen sulfide detection and warning system.
 - (g) The corrective actions, shut-in procedures, H₂S well ignition procedures, and procedures for notifying off-site public authorities listed in the contingency plan to be followed in an emergency.
 - (h) The contents of the permittee's contingency plan.
- (2) Not less than 2 persons per crew shall be trained in emergency first aid procedures, including red cross-approved techniques of cardiopulmonary resuscitation.
- (3) When a drilling contractor or other independent contractor is involved in drilling, completing, testing, producing, repair, workover, or servicing operations on an H₂S well, a permittee of a well may rely on written certification obtained from the contractor that the agents and employees of the contractor involved in the operations have received the training required by this rule. A permittee shall retain the written certification. Failure to ensure that employees receive adequate training and are current in the training is sufficient cause for the suspension of any or all components of the oil and gas operations on the well. A suspension shall continue as provided in R 324.1014(2).

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

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R 324.1108
Source: 1996 AACS.

R 324.1109
Source: 1996 AACS.

R 324.1110
Source: 2001 AACS.

R 324.1111
Source: 1996 AACS.

R 324.1112
Source: 1996 AACS.

R 324.1113
Source: 2001 AACS.

R 324.1114
Source: 1996 AACS.

R 324.1115
Source: 1996 AACS.

R 324.1116
Source: 1996 AACS.

R 324.1117
Source: 1996 AACS.

R 324.1118
Source: 1996 AACS.

R 324.1119
Source: 1996 AACS.

R 324.1120
Source: 1996 AACS.

R 324.1121
Source: 1996 AACS.

R 324.1122 Vessels used for storing hydrogen sulfide-bearing liquid hydrocarbons or hydrogen sulfide-bearing brine; equipment requirements.

Rule 1122. (1) A permittee of a well shall ensure that a vessel which is located at an H₂S well site or in a central production facility serving an H₂S well and which is used for the storage of hydrogen sulfide-bearing liquid hydrocarbons or hydrogen sulfide-bearing brine is equipped with a sealing, pressure-vacuum-type hatch, except that a pressure-vacuum-type hatch is not required on a storage vessel if the venting of vapor to the atmosphere is permitted under subrule (4) of this rule. A hatch shall be kept closed when a tank is not being gauged.

(2) If a storage vessel described in subrule (1) of this rule releases a total 24-hour volume of 5 mcf or more of vapors, then a permittee of a well shall ensure that the vessel is equipped with a vent line for conveying released gasses and vapors to an incinerator, flare, or vapor recovery system. A flashback prevention system shall be installed on the line between a vessel and the incinerator or flare. If a vapor recovery system is used to control tank vapor emissions, then a flare or incinerator shall be available for standby or emergency use. Installing a vapor recovery system does not exempt a flare or incinerator from being in compliance with the requirements of R 324.1123.

(3) If a storage vessel described in subrule (1) of this rule releases a total daily volume of 5 mcf or more of vapors, then a permittee of a well shall install a fence around the vessel equipped with a gate. A fence shall be located not less than 20 feet from the base of a storage vessel. A permittee shall ensure that warning signs with the word "Danger" or "Caution" followed

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by the words "Poison Gas" are installed on all sides of the fence. If the supervisor or authorized representative of the supervisor finds that a threat to the public safety exists due to emissions of sulfur-bearing gas or vapor, then fencing other than that specified in R 324.102(p) may be required.

(4) If a storage vessel described in subrule (1) of this rule releases a total daily volume of 5 mcf or less of vapor, then it may be vented to the atmosphere if the vent is located not less than 10 feet above the tank top and if the opening of the vent is within the diked area or not less than 20 feet above the ground if the opening of the vent is outside the diked area. The supervisor may prohibit venting of vapor to the atmosphere if a verified chronic nuisance odor results from the sulfur-bearing compounds being vented.

(5) If the hydrogen sulfide concentration at the tank thief hatch is more than 500 ppm by volume, then a permittee of a well shall ensure that a tank has a latched gate at the foot of the catwalk stairs. A permittee of a well shall ensure that a sign reading "Self-contained Breathing Apparatus is Recommended Beyond This Point if Hatches are to be Opened" is posted on the gate.

(6) The supervisor may require the use of a tank gauging system that does not require the opening of the tank hatches if a verified chronic nuisance odor results from tank gauging.

(7) A person or a permittee of a well shall not install a tank which is used for the storage of hydrogen sulfide-bearing liquid hydrocarbons or brine from an H₂S well if the separator or treater immediately upstream of the tank has an operating pressure of more than 250 psig unless an independent registered engineer certifies that the facility is designed and constructed such that any release of liquids or gas to the tank shall not cause a release of hydrogen sulfide to the atmosphere.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2001 MR 2, Eff. Feb. 6, 2001; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.1123 Incinerators and flares; equipment and design requirements; additional requirements.

Rule 1123. (1) A permittee of a well shall ensure that an incinerator or flare installed under R 324.1117, R 324.1122, or R 324.1124 is designed and equipped to prevent the release of unburned gas to the atmosphere. If the daily volume of gas handled by the incinerator or flare contains 28 pounds or more of hydrogen sulfide, then a permittee shall ensure that the incinerator or flare is equipped with a mechanism that operates upon failure of the pilot light to shut off the flow of fluid from the wellhead.

(2) A permittee of a well shall ensure that an incinerator or flare required by R 324.1122 is fenced. A fence shall be located not less than 20 feet from the base of the incinerator or flare. A permittee of a well shall ensure that warning signs that have the word "Danger" or "Caution" followed by the words "Poison Gas" are posted on all sides of the fence. If the supervisor or authorized representative of the supervisor finds that a threat to the public safety still exists due to emissions of the incinerator or flare, then fencing other than that specified in R 324.102(p) may be required.

(3) If the supervisor or authorized representative of the supervisor finds that a threat to the public health or safety exists due to the emission of sulfur-bearing gasses or vapors, then a flare stack or incinerator stack that is more than 20 feet high, as specified in R 324.1101(f) and (h), may be required.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

R 324.1124

Source: 1996 AACS.

R 324.1125

Source: 2001 AACS.

R 324.1126

Source: 1996 AACS.

R 324.1127

Source: 1996 AACS.

R 324.1128

Source: 1996 AACS.

R 324.1129

Source: 2001 AACS.

R 324.1130

Source: 2001 AACS.

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PART 12. HEARINGS

R 324.1201
Source: 1996 AACs.

R 324.1202
Source: 1996 AACs.

R 324.1203
Source: 1996 AACs.

R 324.1204
Source: 1996 AACs.

R 324.1205
Source: 1996 AACs.

R 324.1206
Source: 1996 AACs.

R 324.1207
Source: 1996 AACs.

R 324.1208
Source: 1996 AACs.

R 324.1209
Source: 1996 AACs.

R 324.1210
Source: 1996 AACs.

R 324.1211
Source: 1996 AACs.

R 324.1212
Source: 1996 AACs.

PART 13. ENFORCEMENT

R 324.1301 Authority of supervisor.

Rule 1301. The supervisor, under section 61506 of the act, may do any of the following:

(a) Enforce all rules, issue orders, determinations, and instructions necessary to enforce the rules and regulations, and do whatever may be necessary with respect to the subject matter stated in these rules to carry out the purposes of these rules and the act, whether or not the orders, determinations, or instructions are indicated, specified, or enumerated in the act or rules.

(b) Order the suspension of any or all components of the oil and gas operations when a violation exists. The suspension time shall continue until a correction is made and a violation no longer exists under section 61516 of the act. The supervisor may also prohibit the purchaser from taking oil, gas, or brine from the lease during the required suspension time.

(c) Order a well plugged for a continuing violation of the act or these rules.

History: 1996 MR 9, Eff. Sep. 19, 1996; 2002 MR 23, Eff. Dec. 21, 2002.

DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL ASSISTANCE DIVISION

CLEAN CORPORATE CITIZEN PROGRAM

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R 324.1501
Source: 1998-2000 AACS.

R 324.1502
Source: 1998-2000 AACS.

R 324.1503
Source: 1998-2000 AACS.

R 324.1504
Source: 1998-2000 AACS.

R 324.1505
Source: 1998-2000 AACS.

R 324.1506
Source: 1998-2000 AACS.

R 324.1507
Source: 1998-2000 AACS.

R 324.1508
Source: 1998-2000 AACS.

R 324.1509.
Source: 1998-2000 AACS.

R 324.1510
Source: 1998-2000 AACS.

R 324.1511
Source: 1998-2000 AACS.

WASTE MANAGEMENT DIVISION

PART 5. SPILLAGE OF OIL AND POLLUTION MATERIALS

R 324.2001
Source: 2001 AACS.

R 324.2002
Source: 2001 AACS.

R 324.2003
Source: 2001 AACS.

R 324.2004
Source: 2001 AACS.

R 324.2005
Source: 2001 AACS.

R 324.2006
Source: 2001 AACS.

R 324.2007
Source: 2001 AACS.

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R 324.2008
Source: 2001 AACS.

R 324.2009
Source: 2001 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

SURFACE WATER QUALITY DIVISION

CLEAN MICHIGAN INITIATIVE NONPOINT SOURCE POLLUTION CONTROL GRANTS

R 324.8801
Source: 1998-2000 AACS.

R 324.8802
Source: 1998-2000 AACS.

R 324.8803
Source: 1998-2000 AACS.

R 324.8804
Source: 1998-2000 AACS.

R 324.8805
Source: 1998-2000 AACS.

R 324.8806
Source: 1998-2000 AACS.

R 324.8807
Source: 1998-2000 AACS.

R 324.8808
Source: 1998-2000 AACS.

R 324.8809
Source: 1998-2000 AACS.

R 324.8810
Source: 1998-2000 AACS.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

SURFACE WATER QUALITY DIVISION

CLEAN WATER FUND

R 324.8901
Source: 1998-2000 AACS.

R 324.8902
Source: 1998-2000 AACS.

R 324.8903
Source: 1998-2000 AACS.

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R 324.8904
Source: 1998-2000 AACS.

R 324.8905
Source: 1998-2000 AACS.

R 324.8906
Source: 1998-2000 AACS.

R 324.8907
Source: 1998-2000 AACS.

R 324.8908
Source: 1998-2000 AACS.

R 324.8909
Source: 1998-2000 AACS.

R 324.8910
Source: 1998-2000 AACS.

R 324.8911
Source: 1998-2000 AACS.

R 324.8912
Source: 1998-2000 AACS.

R 324.8913
Source: 1998-2000 AACS.

R 324.8914
Source: 1998-2000 AACS.

R 324.8915
Source: 2001 AACS.

R 324.8916
Source: 1998-2000 AACS.

R 324.8917
Source: 1998-2000 AACS.

R 324.8918
Source: 1998-2000 AACS.

R 324.8919
Source: 1998-2000 AACS.

R 324.8920
Source: 1998-2000 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL ASSISTANCE DIVISION

SMALL BUSINESS POLLUTION PREVENTION ASSISTANCE LOAN

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R 324.14501
Source: 1998-2000 AACS.

R 324.14502
Source: 1998-2000 AACS.

R 324.14503
Source: 1998-2000 AACS.

R 324.14504
Source: 1998-2000 AACS.

R 324.14505
Source: 1998-2000 AACS.

R 324.14506
Source: 1998-2000 AACS.

R 324.14507
Source: 1998-2000 AACS.

R 324.14508
Source: 1998-2000 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

STORAGE TANK DIVISION

**MICHIGAN UNDERGROUND STORAGE TANK QUALIFIED
CONSULTANTS AND CERTIFIED PROFESSIONALS**

R 324.21501
Source: 1998-2000 AACS.

R 324.21502
Source: 1998-2000 AACS.

R 324.21503
Source: 1998-2000 AACS.

R 324.21504
Source: 1998-2000 AACS.

R 324.21505
Source: 1998-2000 AACS.

R 324.21506
Source: 1998-2000 AACS.

R 324.21507
Source: 1998-2000 AACS.

R 324.21508
Source: 1998-2000 AACS.

R 324.21509
Source: 1998-2000 AACS.

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R 324.21510
Source: 1998-2000 AACS.

R 324.21511
Source: 1998-2000 AACS.

R 324.21512
Source: 1998-2000 AACS.

R 324.21513
Source: 1998-2000 AACS.

R 324.21514
Source: 1998-2000 AACS.

R 324.21515
Source: 1998-2000 AACS.

R 324.21516
Source: 1998-2000 AACS.

DEPARTMENT OF COMMUNITY HEALTH
BUREAU OF DISEASE CONTROL AND LABORATORY SERVICES
CONTROL OF COMMUNICABLE DISEASES

R 325.1
Source: 1998-2000 AACS.

R 325.2
Source: 1998-2000 AACS.

R 325.3
Source: 1998-2000 AACS.

R 325.4
Source: 1998-2000 AACS.

R 325.5
Source: 1998-2000 AACS.

R 325.6
Source: 1998-2000 AACS.

R 325.7
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R 325.8
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R 325.9
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R 325.10
Source: 1998-2000 AACS.

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R 325.11
Source: 1998-2000 AACS.

R 325.12
Source: 1998-2000 AACS.

R 325.13
Source: 1998-2000 AACS.

R 325.14
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R 325.15
Source: 1998-2000 AACS.

R 325.16
Source: 1998-2000 AACS.

R 325.17
Source: 1998-2000 AACS.

R 325.18
Source: 1998-2000 AACS.

R 325.19
Source: 1998-2000 AACS.

R 325.20
Source: 1998-2000 AACS.

R 325.21
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R 325.22
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R 325.23
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R 325.24
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R 325.25
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R 325.26
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R 325.27
Source: 1998-2000 AACS.

R 325.28
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R 325.29

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Source: 1998-2000 AACS.

R 325.30

Source: 1998-2000 AACS.

R 325.31

Source: 1998-2000 AACS.

R 325.32

Source: 1998-2000 AACS.

R 325.33

Source: 1998-2000 AACS.

R 325.34

Source: 1998-2000 AACS.

R 325.35

Source: 1998-2000 AACS.

R 325.36

Source: 1998-2000 AACS.

R 325.37

Source: 1998-2000 AACS.

R 325.38

Source: 1998-2000 AACS.

R 325.39

Source: 1998-2000 AACS.

R 325.40

Source: 1998-2000 AACS.

R 325.41

Source: 1998-2000 AACS.

R 325.42

Source: 1998-2000 AACS.

R 325.43

Source: 1998-2000 AACS.

R 325.44

Source: 1998-2000 AACS.

R 325.45

Source: 1998-2000 AACS.

R 325.46

Source: 1998-2000 AACS.

R 325.47

Source: 1998-2000 AACS.

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R 325.48
Source: 1998-2000 AACS.

R 325.49
Source: 1998-2000 AACS.

R 325.50
Source: 1998-2000 AACS.

R 325.51
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R 325.52
Source: 1998-2000 AACS.

R 325.53
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R 325.54
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R 325.55
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R 325.56
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R 325.57
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R 325.58
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R 325.59
Source: 1998-2000 AACS.

R 325.60
Source: 1981 AACS.

R 325.61
Source: 1997 AACS.

R 325.70
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R 325.71
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R 325.72
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R 325.80
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R 325.81
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R 325.90
Source: 1997 AACS.

R 325.100
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R 325.101
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R 325.102
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R 325.103
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R 325.104
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R 325.106
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R 325.107
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R 325.110
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R 325.115
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R 325.120
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R 325.121
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HEALTH LEGISLATION AND POLICY DEVELOPMENT
CHILDHOOD IMMUNIZATION REGISTRY

R 325.161
Source: 1997 AACS.

R 325.162
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R 325.163
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R 325.164
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R 325.165
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R 325.166
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R 325.167
Source: 1997 AACS.

R 325.168
Source: 1997 AACS.

R 325.169
Source: 1997 AACS.

BUREAU OF INFECTIOUS DISEASE CONTROL
COMMUNICABLE AND RELATED DISEASES

R 325.171
Source: 1998-2000 AACS.

R 325.172
Source: 1998-2000 AACS.

R 325.173
Source: 1993 AACS.

R 325.174
Source: 1993 AACS.

R 325.175
Source: 1993 AACS.

R 325.176
Source: 1998-2000 AACS.

R 325.177
Source: 1993 AACS.

R 325.178
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R 325.179
Source: 1993 AACS.

R 325.180
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R 325.181
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R 325.199
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RABIES

R 325.201
Source: 1997 AACS.

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OFFICE OF THE DIRECTOR
CONVALESCENT SERA AND VACCINES

R 325.210
Source: 1997 AACS.

R 325.211
Source: 1997 AACS.

R 325.212
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R 325.213
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R 325.214
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R 325.215
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R 325.221
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R 325.222
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R 325.223
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R 325.224
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POLIOMYELITIS VACCINE

R 325.231
Source: 1997 AACS.

R 325.232
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R 325.233

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Source: 1997 AACs.

R 325.234

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R 325.238

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R 325.239

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DIABETES RESEARCH

R 325.271

Source: 1997 AACs.

R 325.272

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R 325.273

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R 325.274

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R 325.275

Source: 1997 AACs.

KIDNEY TRAINING

R 325.281

Source: 1997 AACs.

R 325.282

Source: 1997 AACs.

R 325.283

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R 325.284

Source: 1997 AACs.

BUREAU OF PERSONAL HEALTH SERVICES

MIDWIVES

R 325.321

Source: 1997 AACs.

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R 325.322
Source: 1997 AACS.

R 325.323
Source: 1997 AACS.

R 325.324
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R 325.325
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R 325.326
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R 325.327
Source: 1997 AACS.

R 325.328
Source: 1997 AACS.

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Source: 1997 AACS.

R 325.330
Source: 1997 AACS.

OFFICE OF THE DIRECTOR
MINIMUM STANDARDS FOR GROUP DAY CARE OF CHILDREN

R 325.341
Source: 1997 AACS.

R 325.342
Source: 1997 AACS.

R 325.343
Source: 1997 AACS.

**COMMUNICABLE DISEASES IN CHILDREN IN GROUP RESIDENCE,
CARE, EDUCATION, AND CAMPING**

R 325.351
Source: 1997 AACS.

R 325.352
Source: 1997 AACS.

SPECIAL AGENTS OF BUREAU OF RECORDS AND STATISTICS

R 325.361
Source: 1997 AACS.

BARBER SHOPS

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R 325.451
Source: 1997 AACS.

FOOD ESTABLISHMENTS

R 325.592
Source: 1997 AACS.

R 325.593
Source: 1997 AACS.

BOTTLE CAPS

R 325.741
Source: 1997 AACS.

TRAILER COACH PARKS

R 325.746
Source: 1997 AACS.

BUREAU OF DISEASE CONTROL AND LABORATORY SERVICES
CONTROL OF TUBERCULOSIS

PART 1. STATE SUBSIDY

R 325.763
Source: 1997 AACS.

PART 2. ADMISSIONS TO TUBERCULOSIS HOSPITALS

R 325.771
Source: 1997 AACS.

R 325.772
Source: 1997 AACS.

R 325.773
Source: 1997 AACS.

R 325.775
Source: 1997 AACS.

PART 3. TRANSFERS, DISCHARGES, AND DEATHS

R 325.781
Source: 1997 AACS.

R 325.782
Source: 1997 AACS.

R 325.783
Source: 1997 AACS.

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R 325.784
Source: 1997 AACS.

R 325.786
Source: 1997 AACS.

PART 4A. VOUCHERS FOR COUNTY CHARGE PATIENTS

R 325.801
Source: 1997 AACS.

R 325.802
Source: 1997 AACS.

R 325.803
Source: 1997 AACS.

R 325.804
Source: 1997 AACS.

PART 4B. VOUCHERS FOR STATE AT LARGE PATIENTS

R 325.811
Source: 1997 AACS.

R 325.812
Source: 1997 AACS.

R 325.813
Source: 1997 AACS.

R 325.814
Source: 1997 AACS.

R 325.815
Source: 1997 AACS.

R 325.816
Source: 1997 AACS.

R 325.817
Source: 1997 AACS.

R 325.818
Source: 1997 AACS.

R 325.820
Source: 1997 AACS.

PART 5. REIMBURSEMENTS FOR CARE OF PATIENTS

R 325.831
Source: 1997 AACS.

R 325.832
Source: 1997 AACS.

R 325.833

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Source: 1997 AACS.

R 325.834

Source: 1997 AACS.

PART 6. RECALCITRANT PATIENTS

R 325.841

Source: 1997 AACS.

R 325.842

Source: 1997 AACS.

R 325.843

Source: 1997 AACS.

R 325.844

Source: 1997 AACS.

R 325.845

Source: 1997 AACS.

R 325.846

Source: 1997 AACS.

R 325.847

Source: 1997 AACS.

R 325.848

Source: 1997 AACS.

R 325.849

Source: 1997 AACS.

R 325.850

Source: 1997 AACS.

R 325.851

Source: 1997 AACS.

R 325.852

Source: 1997 AACS.

PART 7. REIMBURSEMENT PROCEDURE

R 325.861

Source: 1997 AACS.

R 325.862

Source: 1997 AACS.

R 325.863

Source: 1997 AACS.

R 325.864

Source: 1997 AACS.

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R 325.865
Source: 1997 AACS.

R 325.866
Source: 1997 AACS.

R 325.867
Source: 1997 AACS.

R 325.871
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R 325.872
Source: 1997 AACS.

R 325.873
Source: 1997 AACS.

R 325.874
Source: 1997 AACS.

R 325.875
Source: 1997 AACS.

PART 8. VOLUNTARY AGREEMENTS BY PATIENTS TO MAKE REIMBURSEMENT

R 325.881
Source: 1997 AACS.

R 325.882
Source: 1997 AACS.

R 325.883
Source: 1997 AACS.

R 325.884
Source: 1997 AACS.

R 325.885
Source: 1997 AACS.

R 325.886
Source: 1997 AACS.

PART 9. WITHHOLDING SUBSIDIES

R 325.891
Source: 1997 AACS.

PART 10. REPORTS OF CHEST X-RAYS

R 325.896
Source: 1997 AACS.

PART 11. EXAMINATION OF PERSONS IN HIGH EXPOSURE GROUPS

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R 325.897
Source: 1997 AACS.

R 325.898
Source: 1997 AACS.

REIMBURSEMENT FOR OUTPATIENT SERVICES

R 325.901
Source: 1997 AACS.

R 325.902
Source: 1997 AACS.

HUMANE CARE AND USE OF ANIMALS

R 325.921
Source: 1980 AACS.

R 325.922
Source: 1980 AACS.

R 325.923
Source: 1980 AACS.

R 325.924
Source: 1980 AACS.

R 325.925
Source: 1980 AACS.

R 325.926
Source: 1980 AACS.

ANATOMY BOARD
ANATOMICAL GIFTS

R 325.951
Source: 1981 AACS.

R 325.952
Source: 1981 AACS.

R 325.953
Source: 1981 AACS.

R 325.954
Source: 1981 AACS.

R 325.955
Source: 1981 AACS.

BUREAU OF DISEASE CONTROL AND LABORATORY SERVICES
HUMANE USE OF ANIMALS

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R 325.981
Source: 1997 AACS.

R 325.982
Source: 1997 AACS.

R 325.983
Source: 1997 AACS.

R 325.984
Source: 1997 AACS.

R 325.985
Source: 1997 AACS.

R 325.986
Source: 1997 AACS.

R 325.987
Source: 1997 AACS.

R 325.988
Source: 1997 AACS.

R 325.989
Source: 1997 AACS.

R 325.990
Source: 1997 AACS.

R 325.991
Source: 1997 AACS.

R 325.992
Source: 1997 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
HEALTH FACILITIES SERVICES ADMINISTRATION
MINIMUM STANDARDS FOR HOSPITALS

PART 3. OPERATIONAL RULES AND MINIMUM STANDARDS FOR ALL
HOSPITAL-PHYSICAL PLANT, FACILITIES, EQUIPMENT, AND OPERATION

R 325.1053
Source: 1981 AACS.

R 325.1054
Source: 1981 AACS.

R 325.1056
Source: 1981 AACS.

DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF THE DIRECTOR

DONATED AND UNCLAIMED DEAD HUMAN BODIES OR PARTS

R 325.1171
Source: 1997 AACS.

R 325.1172
Source: 1997 AACS.

R 325.1173
Source: 1997 AACS.

R 325.1174
Source: 1997 AACS.

R 325.1175
Source: 1997 AACS.

R 325.1176
Source: 1997 AACS.

R 325.1177
Source: 1997 AACS.

HEARINGS

R 325.1201
Source: 1997 AACS.

R 325.1202
Source: 1997 AACS.

R 325.1203
Source: 1997 AACS.

R 325.1204
Source: 1997 AACS.

R 325.1205
Source: 1997 AACS.

R 325.1206
Source: 1997 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
BOARD OF EXAMINERS FOR SANITARIANS

R 325.1401
Source: 1997 AACS.

R 325.1402
Source: 1997 AACS.

R 325.1403
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R 325.1404

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Source: 1997 AACs.

R 325.1405

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R 325.1406

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R 325.1407

Source: 1997 AACs.

R 325.1408

Source: 1997 AACs.

R 325.1409

Source: 1997 AACs.

R 325.1410

Source: 1997 AACs.

R 325.1411

Source: 1997 AACs.

R 325.1412

Source: 1997 AACs.

DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF THE DIRECTOR
PRESCHOOL VISION TESTS

R 325.1481

Source: 1997 AACs.

DISEASE CONTROL IN SCHOOLS

R 325.1491

Source: 1997 AACs.

DEPARTMENT OF AGRICULTURE
AGRICULTURAL LABOR CAMPS

R 325.1501

Source: 1997 AACs.

R 325.1502

Source: 1997 AACs.

R 325.1503

Source: 1997 AACs.

R 325.1504

Source: 1997 AACs.

R 325.1505

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Source: 1997 AACS.

R 325.1506

Source: 1997 AACS.

R 325.1507

Source: 1997 AACS.

R 325.1508

Source: 1997 AACS.

R 325.1509

Source: 1997 AACS.

R 325.1510

Source: 1997 AACS.

R 325.1511

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R 325.1512

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R 325.1513

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R 325.1514

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R 325.1515

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R 325.1531

Source: 1997 AACS.

R 325.1532

Source: 1997 AACS.

R 325.1533

Source: 1997 AACS.

R 325.1534

Source: 1997 AACS.

R 325.1535

Source: 1997 AACS.

R 325.1536

Source: 1997 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

DRINKING WATER AND RADIOLOGICAL PROTECTION DIVISION

MEDICAL WASTE PRODUCING FACILITIES

325.1541

Source: 1998-2000 AACS.

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325.1542
Source: 1998-2000 AACS.

325.1543
Source: 1998-2000 AACS.

325.1544
Source: 1998-2000 AACS.

325.1545
Source: 1998-2000 AACS.

325.1546
Source: 1998-2000 AACS.

325.1547
Source: 1998-2000 AACS.

325.1548
Source: 1998-2000 AACS.

325.1549
Source: 1998-2000 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENVIRONMENTAL HEALTH
CAMPGROUNDS

R 325.1551
Source: 1998-2000 AACS.

R 325.1552
Source: 1998-2000 AACS.

R 325.1553
Source: 1998-2000 AACS.

R 325.1554
Source: 1998-2000 AACS.

R 325.1555
Source: 1998-2000 AACS.

R 325.1555a
Source: 1998-2000 AACS.

R 325.1555b
Source: 1998-2000 AACS.

R 325.1556
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R 325.1556a
Source: 1998-2000 AACS.

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R 325.1556b
Source: 1998-2000 AACS.

R 325.1557
Source: 1998-2000 AACS.

R 325.1558
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R 325.1559
Source: 1998-2000 AACS.

R 325.1560
Source: 1998-2000 AACS.

R 325.1561
Source: 1998-2000 AACS.

R 325.1562
Source: 1998-2000 AACS.

R 325.1563
Source: 1998-2000 AACS.

R 325.1564
Source: 1998-2000 AACS.

R 325.1566
Source: 1998-2000 AACS.

R 325.1568
Source: 1998-2000 AACS.

R 325.1569
Source: 1987 AACS.

R 325.1571
Source: 1998-2000 AACS.

R 325.1574
Source: 1998-2000 AACS.

R 325.1576
Source: 1998-2000 AACS.

R 325.1585
Source: 1987 AACS.

R 325.1586
Source: 1998-2000 AACS.

R 325.1599
Source: 1998-2000 AACS.

DIVISION OF WATER SUPPLY
GROUNDWATER QUALITY CONTROL

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PART 1. WELL CONSTRUCTION CODE

R 325.1601
Source: 1994 AACS.

R 325.1601a
Source: 1994 AACS.

R 325.1602
Source: 1994 AACS.

R 325.1603
Source: 1994 AACS.

R 325.1603a
Source: 1994 AACS.

R 325.1604
Source: 1994 AACS.

R 325.1605
Source: 1994 AACS.

R 325.1606
Source: 1994 AACS.

R 325.1607
Source: 1994 AACS.

R 325.1608
Source: 1994 AACS.

R 325.1610
Source: 1994 AACS.

R 325.1611
Source: 1994 AACS.

R 325.1612
Source: 1994 AACS.

R 325.1613
Source: 1994 AACS.

R 325.1621
Source: 1994 AACS.

R 325.1622
Source: 1994 AACS.

R 325.1624
Source: 1994 AACS.

R 325.1625
Source: 1994 AACS.

R 325.1626
Source: 1994 AACS.

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R 325.1627
Source: 1994 AACS.

R 325.1631
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R 325.1631a
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R 325.1631b
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R 325.1631c
Source: 1994 AACS.

R 325.1631d
Source: 1994 AACS.

R 325.1632
Source: 1994 AACS.

R 325.1632a
Source: 1994 AACS.

R 325.1633
Source: 1997 AACS.

R 325.1633a
Source: 1994 AACS.

R 325.1634
Source: 1997 AACS.

R 325.1634a
Source: 1994 AACS.

R 325.1635
Source: 1994 AACS.

R 325.1636
Source: 1997 AACS.

R 325.1637
Source: 1994 AACS.

R 325.1637a
Source: 1994 AACS.

R 325.1638
Source: 1994 AACS.

R 325.1639
Source: 1994 AACS.

R 325.1640
Source: 1994 AACS.

R 325.1641
Source: 1994 AACS.

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R 325.1642
Source: 1994 AACS.

R 325.1651
Source: 1994 AACS.

R 325.1652
Source: 1997 AACS.

R 325.1653
Source: 1994 AACS.

R 325.1653a
Source: 1994 AACS.

R 325.1654
Source: 1994 AACS.

R 325.1655
Source: 1994 AACS.

R 325.1656
Source: 1994 AACS.

R 325.1656a
Source: 1994 AACS.

R 325.1657
Source: 1994 AACS.

R 325.1657a
Source: 1994 AACS.

R 325.1658
Source: 1994 AACS.

R 325.1661
Source: 1994 AACS.

R 325.1662
Source: 1994 AACS.

R 325.1663
Source: 1994 AACS.

R 325.1664
Source: 1994 AACS.

R 325.1665
Source: 1994 AACS.

R 325.1666
Source: 1997 AACS.

R 325.1667
Source: 1994 AACS.

R 325.1668
Source: 1994 AACS.

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R 325.1669
Source: 1994 AACS.

R 325.1670
Source: 1994 AACS.

R 325.1671
Source: 1997 AACS.

R 325.1672
Source: 1994 AACS.

R 325.1673
Source: 1994 AACS.

R 325.1674
Source: 1994 AACS.

R 325.1674a
Source: 1994 AACS.

R 325.1675
Source: 1994 AACS.

R 325.1676
Source: 1994 AACS.

PART 2. DRILLING CONTRACTORS' AND PUMP INSTALLERS' REGISTRATION

R 325.1701
Source: 1994 AACS.

R 325.1701a
Source: 1994 AACS.

R 325.1702
Source: 1994 AACS.

R 325.1703
Source: 1994 AACS.

R 325.1704
Source: 1994 AACS.

R 325.1705
Source: 1997 AACS.

R 325.1705a
Source: 1994 AACS.

R 325.1706
Source: 1994 AACS.

R 325.1707
Source: 1994 AACS.

R 325.1707a
Source: 1994 AACS.

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R 325.1708
Source: 1994 AACS.

R 325.1709
Source: 1994 AACS.

R 325.1711
Source: 1994 AACS.

PART 3. DRILLING MACHINES AND SERVICE VEHICLES

R 325.1721
Source: 1994 AACS.

R 325.1722
Source: 1994 AACS.

NURSING HOMES

R 325.1901
Source: 1997 AACS.

R 325.1909
Source: 1997 AACS.

R 325.1911
Source: 1997 AACS.

R 325.1912
Source: 1997 AACS.

R 325.1913
Source: 1997 AACS.

R 325.1914
Source: 1997 AACS.

R 325.1915
Source: 1997 AACS.

R 325.1916
Source: 1997 AACS.

R 325.1919
Source: 1997 AACS.

R 325.1923
Source: 1997 AACS.

R 325.1925
Source: 1997 AACS.

R 325.1927
Source: 1997 AACS.

R 325.1928
Source: 1997 AACS.

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R 325.1931
Source: 1997 AACCS.

R 325.1933
Source: 1997 AACCS.

R 325.1935
Source: 1997 AACCS.

R 325.1936
Source: 1997 AACCS.

R 325.1937
Source: 1997 AACCS.

R 325.1938
Source: 1997 AACCS.

R 325.1939
Source: 1997 AACCS.

R 325.1941
Source: 1997 AACCS.

R 325.1942
Source: 1997 AACCS.

R 325.1943
Source: 1997 AACCS.

R 325.1945
Source: 1997 AACCS.

R 325.1947
Source: 1997 AACCS.

R 325.1951
Source: 1997 AACCS.

R 325.1952
Source: 1997 AACCS.

R 325.1953
Source: 1997 AACCS.

R 325.1954
Source: 1997 AACCS.

R 325.1957
Source: 1997 AACCS.

R 325.1959
Source: 1997 AACCS.

R 325.1961

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Source: 1997 AACS.

R 325.1962

Source: 1997 AACS.

R 325.1963

Source: 1997 AACS.

R 325.1964

Source: 1997 AACS.

R 325.1965

Source: 1997 AACS.

R 325.1967

Source: 1997 AACS.

R 325.1968

Source: 1997 AACS.

R 325.1969

Source: 1997 AACS.

R 325.1971

Source: 1997 AACS.

R 325.1972

Source: 1997 AACS.

R 325.1973

Source: 1997 AACS.

R 325.1974

Source: 1997 AACS.

R 325.1975

Source: 1997 AACS.

R 325.1981

Source: 1997 AACS.

R 325.1982

Source: 1997 AACS.

R 325.1983

Source: 1997 AACS.

R 325.1984

Source: 1997 AACS.

R 325.1985

Source: 1997 AACS.

R 325.1986

Source: 1997 AACS.

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R 325.1991
Source: 1997 AACCS.

R 325.1993
Source: 1997 AACCS.

R 325.1995
Source: 1997 AACCS.

R 325.1997
Source: 1997 AACCS.

R 325.2001
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R 325.2002
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R 325.2004
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R 325.2005
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R 325.2007
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R 325.2011
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R 325.2012
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R 325.2013
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R 325.2014
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R 325.2015
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R 325.2016
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R 325.2017
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R 325.2018
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R 325.2019
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R 325.2020
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R 325.2021
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R 325.2022
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R 325.2023
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R 325.2027
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R 325.2028
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R 325.2031
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R 325.2032
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R 325.2033
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R 325.2034
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R 325.2036
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R 325.2038
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R 325.2041
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R 325.2051

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Source: 1997 AACs.

R 325.2052

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R 325.2055

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R 325.2057

Source: 1997 AACs.

R 325.2059

Source: 1997 AACs.

R 325.2061

Source: 1997 AACs.

R 325.2062

Source: 1997 AACs.

R 325.2064

Source: 1997 AACs.

R 325.2065

Source: 1997 AACs.

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Source: 1997 AACs.

R 325.2068

Source: 1997 AACs.

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Source: 1997 AACs.

R 325.2072

Source: 1997 AACs.

R 325.2073

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R 325.2081

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R 325.2083
Source: 1997 AACS.

R 325.2084
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R 325.2091
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R 325.2093
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R 325.2094
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R 325.2095
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R 325.2096
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R 325.2097
Source: 1997 AACS.

DEPARTMENT OF COMMUNITY HEALTH
BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
PUBLIC BATHING BEACHES

R 325.2101
Source: 1995 AACS.

R 325.2102
Source: 1995 AACS.

R 325.2103
Source: 1995 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL AND OCCUPATIONAL HEALTH SERVICES ADMINISTRATION
PUBLIC SWIMMING POOLS

PART 1. GENERAL PROVISIONS

R 325.2111
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R 325.2113
Source: 2001 AACS.

R 325.2113a
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R 325.2114
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R 325.2115
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R 325.2116
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R 325.2118
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R 325.2118a
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R 325.2118d
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PART 2. CONSTRUCTION

R 325.2121
Source: 2001 AACS.

R 325.2122
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R 325.2123
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R 325.2124
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R 325.2125
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R 325.2126
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R 325.2155
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R 325.2158
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R 325.2163
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R 325.2199

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DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
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R 325.2201

Source: 1997 AACS.

R 325.2202

Source: 1997 AACS.

R 325.2203

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R 325.2204

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R 325.2205

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R 325.2206

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R 325.2207

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BUREAU OF HEALTH CARE ADMINISTRATION
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R 325.2211
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R 325.2221
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R 325.2222
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R 325.2223
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R 325.2224
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R 325.2225
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R 325.2226
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R 325.2228
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R 325.2231
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R 325.2241
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R 325.2242
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R 325.2243
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Source: 1997 AACS.

BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
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R 325.2430
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DEPARTMENT OF AGRICULTURE
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R 325.2501
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R 325.2502
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R 325.2503
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R 325.2504
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R 325.2505
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DEPARTMENT OF COMMUNITY HEALTH
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MERCURY LEVELS IN FISH FROM MICHIGAN WATERS

R 325.2601
Source: 1997 AACS.

R 325.2602
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R 325.2603
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R 325.2604
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R 325.2605
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DEPARTMENT OF STATE POLICE
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TESTS FOR BREATH ALCOHOL

R 325.2651
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R 325.2652
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R 325.2653
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R 325.2654
Source: 1992 AACS.

R 325.2655
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R 325.2656
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R 325.2657
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R 325.2658
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FORENSIC SCIENCE DIVISION
ALCOHOL TESTING OF BLOOD AND URINE

R 325.2671
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R 325.2672
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R 325.2673
Source: 1993 AACS.

R 325.2674
Source: 1993 AACS.

R 325.2675
Source: 1993 AACS.

R 325.2676
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R 325.2677
Source: 1997 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY
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SOLID WASTE DISPOSAL

R 325.2701
Source: 1997 AACS.

R 325.2702
Source: 1997 AACS.

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R 325.2721
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R 325.2722
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R 325.2723
Source: 1997 AACCS.

R 325.2731
Source: 1997 AACCS.

R 325.2732
Source: 1997 AACCS.

R 325.2733
Source: 1997 AACCS.

R 325.2734
Source: 1997 AACCS.

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Source: 1997 AACCS.

R 325.2742
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R 325.2743
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R 325.2744
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R 325.2745
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R 325.2749
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R 325.2751
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R 325.2752
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R 325.2753
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R 325.2754
Source: 1997 AACCS.

R 325.2755
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R 325.2756
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R 325.2758
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R 325.2759
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R 325.2760
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R 325.2773
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R 325.2774
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R 325.2775

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Source: 1997 AACS.

R 325.2776

Source: 1997 AACS.

R 325.2777

Source: 1997 AACS.

R 325.2778

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R 325.2781

Source: 1997 AACS.

R 325.2782

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R 325.2785

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R 325.2786

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R 325.2787

Source: 1997 AACS.

R 325.2788

Source: 1997 AACS.

R 325.2789

Source: 1997 AACS.

DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF THE DIRECTOR
CERTIFICATION OF SPECIAL SERVICES IN HOSPITALS

R 325.3001

Source: 1997 AACS.

R 325.3051

Source: 1997 AACS.

R 325.3053

Source: 1997 AACS.

R 325.3055

Source: 1997 AACS.

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R 325.3057
Source: 1997 AACCS.

R 325.3058
Source: 1997 AACCS.

R 325.3061
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R 325.3063
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R 325.3078
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R 325.3079
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R 325.3080
Source: 1997 AACCS.

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R 325.3082
Source: 1997 AACs.

R 325.3084
Source: 1997 AACs.

R 325.3085
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R 325.3087
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R 325.3088
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R 325.3089
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R 325.3091
Source: 1997 AACs.

R 325.3101
Source: 1997 AACs.

R 325.3103
Source: 1997 AACs.

R 325.3105
Source: 1997 AACs.

R 325.3107
Source: 1997 AACs.

R 325.3108
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R 325.3110
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R 325.3112
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R 325.3113
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R 325.3114
Source: 1997 AACs.

R 325.3116
Source: 1997 AACs.

R 325.3117
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R 325.3118

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R 325.3119

Source: 1997 AACs.

R 325.3121

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R 325.3123

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R 325.3124

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R 325.3125

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R 325.3139

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R 325.3140

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R 325.3141

Source: 1997 AACs.

R 325.3142

Source: 1997 AACs.

R 325.3144

Source: 1997 AACs.

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R 325.3151
Source: 1997 AACs.

R 325.3153
Source: 1997 AACs.

R 325.3155
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R 325.3157
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R 325.3170
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R 325.3171
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R 325.3172
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R 325.3173
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R 325.3174
Source: 1997 AACs.

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R 325.3176
Source: 1997 AACS.

R 325.3178
Source: 1997 AACS.

R 325.3181
Source: 1997 AACS.

R 325.3182
Source: 1997 AACS.

R 325.3184
Source: 1997 AACS.

R 325.3185
Source: 1997 AACS.

R 325.3187
Source: 1997 AACS.

OFFICE OF VITAL AND HEALTH STATISTICS
COMPLETION, FILING, AND REGISTRATION OF VITAL RECORDS DOCUMENTS

R 325.3201
Source: 1981 AACS.

R 325.3202
Source: 1981 AACS.

R 325.3203
Source: 1981 AACS.

R 325.3204
Source: 1981 AACS.

R 325.3205
Source: 1981 AACS.

R 325.3206
Source: 1981 AACS.

R 325.3207
Source: 1981 AACS.

R 325.3208
Source: 1981 AACS.

R 325.3209
Source: 1981 AACS.

R 325.3210
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R 325.3211
Source: 1981 AACS.

R 325.3212
Source: 1981 AACS.

R 325.3213
Source: 1981 AACS.

R 325.3214
Source: 1981 AACS.

R 325.3215
Source: 1981 AACS.

R 325.3216
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R 325.3217
Source: 1981 AACS.

R 325.3218
Source: 1981 AACS.

R 325.3219
Source: 1981 AACS.

R 325.3220
Source: 1981 AACS.

R 325.3221
Source: 1981 AACS.

VITAL RECORDS INSPECTION AND DISCLOSURE

R 325.3231
Source: 1983 AACS.

R 325.3232
Source: 1983 AACS.

R 325.3233
Source: 1983 AACS.

R 325.3234
Source: 1983 AACS.

R 325.3235
Source: 1983 AACS.

R 325.3236
Source: 1983 AACS.

AMENDMENTS TO VITAL RECORDS

R 325.3251
Source: 1981 AACS.

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R 325.3252
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R 325.3253
Source: 1981 AACS.

R 325.3254
Source: 1981 AACS.

R 325.3255
Source: 1981 AACS.

R 325.3256
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R 325.3257
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R 325.3258
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R 325.3259
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R 325.3260
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R 325.3261
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R 325.3262
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R 325.3263
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R 325.3264
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R 325.3265
Source: 1981 AACS.

R 325.3266
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R 325.3267
Source: 1981 AACS.

DIVISION OF CHILD HEALTH
HEARING SCREENING AND TESTS

R 325.3271
Source: 1981 AACS.

R 325.3272
Source: 1981 AACS.

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R 325.3273
Source: 1981 AACS.

R 325.3274
Source: 1981 AACS.

R 325.3275
Source: 1981 AACS.

R 325.3276
Source: 1981 AACS.

DEPARTMENT OF AGRICULTURE
BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
MOBILE HOME PARKS AND SEASONAL MOBILE HOME PARKS

PART 1. GENERAL PROVISIONS

R 325.3311
Source: 1984 AACS.

R 325.3312
Source: 1980 AACS.

R 325.3313
Source: 1980 AACS.

R 325.3314
Source: 1984 AACS.

PART 2. WATER SUPPLY SYSTEMS

R 325.3321
Source: 1984 AACS.

PART 3. SEWAGE COLLECTION AND DISPOSAL SYSTEMS

R 325.3331
Source: 1984 AACS.

R 325.3332
Source: 1984 AACS.

R 325.3333
Source: 1980 AACS.

R 325.3334
Source: 1984 AACS.

R 325.3335
Source: 1984 AACS.

PART 4. DRAINAGE

R 325.3341
Source: 1984 AACS.

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R 325.3342
Source: 1984 AACS.

R 325.3343
Source: 1984 AACS.

R 325.3344
Source: 1980 AACS.

R 325.3345
Source: 1980 AACS.

R 325.3346
Source: 1980 AACS.

R 325.3347
Source: 1984 AACS.

R 325.3348
Source: 1980 AACS.

R 325.3349
Source: 1980 AACS.

PART 5. GARBAGE AND RUBBISH STORAGE AND DISPOSAL

R 325.3351
Source: 1984 AACS.

R 325.3352
Source: 1984 AACS.

R 325.3353
Source: 1984 AACS.

R 325.3354
Source: 1984 AACS.

PART 6. INSECT AND RODENT CONTROL

R 325.3361
Source: 1984 AACS.

R 325.3362
Source: 1984 AACS.

R 325.3363
Source: 1980 AACS.

PART 7. GENERAL OPERATION, MAINTENANCE, AND SAFETY

R 325.3371
Source: 1984 AACS.

R 325.3372
Source: 1984 AACS.

R 325.3373

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Source: 1984 AACS.

R 325.3374

Source: 1984 AACS.

PART 8. COORDINATION OF APPROVALS FOR CONSTRUCTION

R 325.3381

Source: 1984 AACS.

R 325.3382

Source: 1984 AACS.

R 325.3383

Source: 1980 AACS.

R 325.3384

Source: 1984 AACS.

R 325.3385

Source: 1984 AACS.

PART 9. CERTIFICATION OF COMPLIANCE

R 325.3391

Source: 1984 AACS.

R 325.3392

Source: 1984 AACS.

R 325.3393

Source: 1984 AACS.

DEPARTMENT OF COMMUNITY HEALTH
BUREAU OF DISEASE CONTROL AND LABORATORY SERVICES
VENEREAL DISEASE

R 325.3401

Source: 1997 AACS.

R 325.3402

Source: 1997 AACS.

R 325.3403

Source: 1997 AACS.

R 325.3404

Source: 1997 AACS.

R 325.3405

Source: 1997 AACS.

R 325.3406

Source: 1997 AACS.

R 325.3407

Source: 1997 AACS.

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R 325.3408
Source: 1997 AACS.

R 325.3409
Source: 1997 AACS.

R 325.3410
Source: 1981 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
OCCUPATIONAL HEALTH STANDARDS COMMISSION
EMPLOYEE MEDICAL RECORDS AND TRADE SECRETS

R 325.3451
Source: 1983 AACS.

R 325.3452
Source: 1998-2000 AACS.

R 325.3453
Source: 1998-2000 AACS.

R 325.3454
Source: 1983 AACS.

R 325.3455
Source: 1983 AACS.

R 325.3456
Source: 1993 AACS.

R 325.3457
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R 325.3458
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R 325.3459
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R 325.3460
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R 325.3461
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R 325.3462
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R 325.3463
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R 325.3464
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R 325.3465
Source: 1983 AACS.

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- R 325.3466**
Source: 1983 AACS.
- R 325.3467**
Source: 1993 AACS.
- R 325.3468**
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- R 325.3469**
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- R 325.3470**
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- R 325.3471**
Source: 1993 AACS.
- R 325.3472**
Source: 1993 AACS.
- R 325.3472a**
Source: 1993 AACS.
- R 325.3473**
Source: 1993 AACS.
- R 325.3474**
Source: 1983 AACS.
- R 325.3475**
Source: 1983 AACS.
- R 325.3476**
Source: 1998-2000 AACS.

DEPARTMENT OF COMMUNITY HEALTH
BUREAU OF DISEASE CONTROL AND LABORATORY SERVICES
IMMUNIZATIONS IN SCHOOLS, DAY CARE CENTERS, AND CAMPING PROGRAMS

- R 325.3501**
Source: 1997 AACS.
- R 325.3502**
Source: 1997 AACS.
- R 325.3503**
Source: 1997 AACS.
- R 325.3504**
Source: 1997 AACS.
- R 325.3505**
Source: 1997 AACS.
- R 325.3506**
Source: 1997 AACS.

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R 325.3507
Source: 1997 AACS.

R 325.3508
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R 325.3509
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R 325.3510
Source: 1997 AACS.

R 325.3511
Source: 1997 AACS.

R 325.3512
Source: 1997 AACS.

R 325.3513
Source: 1997 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
BUREAU OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH
ASBESTOS CONTRACTOR LICENSING

R 325.3551
Source: 1988 AACS.

R 325.3553
Source: 1988 AACS.

R 325.3555
Source: 1988 AACS.

R 325.3557
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R 325.3559
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R 325.3561
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R 325.3565
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R 325.3567
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R 325.3569
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R 325.3571
Source: 1988 AACS.

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AGRICULTURAL LABOR CAMPS

R 325.3601
Source: 1989 AACS.

R 325.3603
Source: 1989 AACS.

R 325.3605
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R 325.3607
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R 325.3609
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R 325.3611
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R 325.3613
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R 325.3615
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R 325.3617
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R 325.3619
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R 325.3621
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R 325.3623
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R 325.3625
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R 325.3627
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R 325.3629
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R 325.3631
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R 325.3633
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R 325.3635
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R 325.3637
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R 325.3639
Source: 1989 AACS.

R 325.3641
Source: 1989 AACS.

R 325.3643
Source: 1989 AACS.

R 325.3699
Source: 1989 AACS.

DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF THE DIRECTOR
TOXIC SUBSTANCE LOAN PROGRAM

R 325.3701
Source: 1997 AACS.

R 325.3702
Source: 1997 AACS.

R 325.3703
Source: 1997 AACS.

R 325.3704
Source: 1997 AACS.

R 325.3705
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R 325.3706
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R 325.3707
Source: 1997 AACS.

R 325.3708
Source: 1997 AACS.

R 325.3709
Source: 1997 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
BUREAU OF HEALTH SYSTEMS
FREESTANDING SURGICAL OUTPATIENT FACILITIES

R 325.3801
Source: 2001 AACS.

R 325.3802
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R 325.3803
Source: 2001 AACS.

R 325.3811
Source: 2001 AACS.

R 325.3812
Source: 2001 AACS.

R 325.3815
Source: 2001 AACS.

R 325.3816
Source: 2001 AACS.

R 325.3817
Source: 2001 AACS.

R 325.3818
Source: 2001 AACS.

R 325.3819
Source: 2001 AACS.

R 325.3811
Source: 2001 AACS.

R 325.3826 Informed consents.

Rule 28. (1) Except as provided by subrule (2) of this rule, the owner or governing body shall adopt and enforce a policy which will require that informed consents will be obtained from a patient or, in case of an unemancipated minor, the responsible relative or guardian before the performance of surgical procedures, and shall require that signed written consent forms be placed in each patient's chart.

(2) The owner or governing body of a pregnancy termination facility shall adopt and enforce a policy which will require that informed consents be obtained in compliance with section 17015 of the code, MCL 333.17015. In the case of an unemancipated minor, informed consents will also be obtained in compliance with 1990 PA 211, MCL 722.901, et seq.

History: 1954 ACS 86, Eff. Feb. 10, 1976; 1979 AC; 2001 MR 10, Eff. Jun. 7, 2001.

R 325.3832
Source: 2001 AACS.

R 325.3835
Source: 2001 AACS.

R 325.3851
Source: 2001 AACS.

R 325.3857
Source: 2001 AACS.

R 325.3866
Source: 2001 AACS.

R 325.3867
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R 325.3868a
Source: 2001 AACS.

OFFICE OF SUBSTANCE ABUSE SERVICES
SUBSTANCE ABUSE SERVICES PROGRAMS

R 325.4001
Source: 1997 AACS.

R 325.4002
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R 325.4003
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R 325.4004
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R 325.4005
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R 325.4006
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R 325.4011
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R 325.4012
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R 325.4014
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R 325.4015
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R 325.4018

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R 325.4041
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R 325.4042
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R 325.4043
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R 325.4064
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R 325.4065
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R 325.4066
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R 325.4067
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R 325.4071
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R 325.4081
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R 325.4082
Source: 1997 AACS.

R 325.4083
Source: 1997 AACS.

R 325.4084
Source: 1997 AACS.

PROGRAM MATCH REQUIREMENTS

R 325.4151
Source: 1981 AACS.

R 325.4152
Source: 1981 AACS.

R 325.4153
Source: 1981 AACS.

R 325.4154
Source: 1997 AACS.

R 325.4155
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R 325.4156
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DIVISION OF RADIOLOGICAL HEALTH
IONIZING RADIATION
PART 14. MAMMOGRAPHY

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GENERAL PROVISIONS

R 325.5601
Source: 1993 AACS.

R 325.5602
Source: 1993 AACS.

R 325.5603
Source: 1993 AACS.

MAMMOGRAPHY AUTHORIZATION

R 325.5605
Source: 1993 AACS.

R 325.5606
Source: 1993 AACS.

R 325.5607
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R 325.5608
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R 325.5609
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R 325.5610
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R 325.5611
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R 325.5612
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R 325.5613
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MAMMOGRAPHY SUPERVISOR

R 325.5617
Source: 1993 AACS.

R 325.5618
Source: 1993 AACS.

R 325.5619
Source: 1993 AACS.

OPERATORS OF MAMMOGRAPHY EQUIPMENT

R 325.5621
Source: 1993 AACS.

R 325.5622
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R 325.5623
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R 325.5624
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R 325.5625
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RADIATION PHYSICIST

R 325.5631
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R 325.5632
Source: 1993 AACS.

R 325.5633
Source: 1993 AACS.

X-RAY EQUIPMENT

R 325.5637
Source: 1993 AACS.

R 325.5638
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R 325.5639
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R 325.5640
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R 325.5641
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R 325.5649
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R 325.5650
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R 325.5651
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R 325.5652
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R 325.5655
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R 325.5656
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QUALITY CONTROL

R 325.5659
Source: 1993 AACS.

R 325.5660
Source: 1993 AACS.

R 325.5661
Source: 1993 AACS.

R 325.5662
Source: 1993 AACS.

R 325.5663
Source: 1993 AACS.

R 325.5664
Source: 1993 AACS.

R 325.5665
Source: 1993 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY
DRINKING WATER AND RADIOLOGICAL PROTECTION DIVISION
RADIOACTIVE MATERIAL TRANSPORTATION

R 325.5801
Source: 1997 AACS.

R 325.5802
Source: 1997 AACS.

R 325.5803
Source: 1997 AACS.

R 325.5804
Source: 1997 AACS.

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R 325.5805
Source: 1997 AACS.

R 325.5806
Source: 1997 AACS.

R 325.5807
Source: 1997 AACS.

R 325.5808
Source: 1997 AACS.

R 325.5809
Source: 1997 AACS.

R 325.5810
Source: 1997 AACS.

BUREAU OF HEALTH CARE ADMINISTRATION
FREESTANDING SURGICAL OUTPATIENT FACILITIES
DIFFERENTIATED FROM PRIVATE PRACTICE OFFICES

R 325.6001
Source: 1980 AACS.

R 325.6002
Source: 1980 AACS.

DEPARTMENT OF COMMUNITY HEALTH
AND INSURANCE BUREAU
HEALTH MAINTENANCE ORGANIZATIONS

PART 1. GENERAL PROVISIONS

R 325.6101
Source: 1988 AACS.

R 325.6105
Source: 1988 AACS.

R 325.6110
Source: 1988 AACS.

R 325.6115
Source: 1988 AACS.

R 325.6120
Source: 1997 AACS.

R 325.6125
Source: 1988 AACS.

R 325.6130
Source: 1988 AACS.

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R 325.6135
Source: 1988 AACS.

PART 2. STATE ADMINISTRATION

R 325.6201
Source: 1997 AACS.

R 325.6205
Source: 1988 AACS.

R 325.6210
Source: 1988 AACS.

R 325.6215
Source: 1997 AACS.

R 325.6220
Source: 1997 AACS.

R 325.6225
Source: 1997 AACS.

R 325.6230
Source: 1988 AACS.

R 325.6235
Source: 1988 AACS.

R 325.6240
Source: 1988 AACS.

R 325.6245
Source: 1988 AACS.

R 325.6250
Source: 1997 AACS.

R 325.6255
Source: 1997 AACS.

R 325.6260
Source: 1997 AACS.

R 325.6265
Source: 1997 AACS.

R 325.6270
Source: 1988 AACS.

R 325.6275
Source: 1988 AACS.

R 325.6280
Source: 1997 AACS.

R 325.6285
Source: 1988 AACS.

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R 325.6290
Source: 1988 AACS.

PART 3. BUSINESS AND OPERATIONAL REQUIREMENTS

R 325.6301
Source: 1988 AACS.

R 325.6305
Source: 1988 AACS.

R 325.6310
Source: 1988 AACS.

R 325.6315
Source: 1988 AACS.

R 325.6320
Source: 1997 AACS.

R 325.6325
Source: 1997 AACS.

R 325.6330
Source: 1988 AACS.

R 325.6335
Source: 1988 AACS.

R 325.6340
Source: 1988 AACS.

R 325.6345
Source: 1988 AACS.

R 325.6350
Source: 1988 AACS.

R 325.6355
Source: 1988 AACS.

R 325.6360
Source: 1988 AACS.

R 325.6365
Source: 1988 AACS.

PART 4. SUBSCRIBER CONTRACTS, COVERAGE, AND RELATED REQUIREMENTS

R 325.6401
Source: 1988 AACS.

R 325.6405
Source: 1988 AACS.

R 325.6410
Source: 1988 AACS.

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R 325.6415
Source: 1988 AACs.

R 325.6420
Source: 1988 AACs.

R 325.6425
Source: 1988 AACs.

R 325.6430
Source: 1988 AACs.

PART 5. MARKETING AND ENROLLMENT

R 325.6501
Source: 1988 AACs.

R 325.6505
Source: 1988 AACs.

R 325.6510
Source: 1988 AACs.

R 325.6515
Source: 1997 AACs.

**PART 6. STANDARDS FOR SERVICES, STAFFING, QUALITY ASSURANCE,
AND UTILIZATION REVIEW**

R 325.6601
Source: 1988 AACs.

R 325.6605
Source: 1988 AACs.

R 325.6610
Source: 1988 AACs.

R 325.6615
Source: 1988 AACs.

R 325.6620
Source: 1988 AACs.

R 325.6625
Source: 1988 AACs.

R 325.6635
Source: 1988 AACs.

PART 7. FACILITY STANDARDS

R 325.6701
Source: 1988 AACs.

R 325.6702
Source: 1988 AACs.

R 325.6705

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Source: 1997 AACS.

R 325.6710

Source: 1991 AACS.

R 325.6715

Source: 1988 AACS.

R 325.6720

Source: 1988 AACS.

R 325.6725

Source: 1988 AACS.

R 325.6730

Source: 1988 AACS.

R 325.6735

Source: 1988 AACS.

R 325.6740

Source: 1988 AACS.

R 325.6745

Source: 1988 AACS.

R 325.6750

Source: 1988 AACS.

R 325.6755

Source: 1988 AACS.

R 325.6760

Source: 1997 AACS.

R 325.6765

Source: 1997 AACS.

R 325.6770

Source: 1997 AACS.

R 325.6775

Source: 1997 AACS.

R 325.6780

Source: 1988 AACS.

R 325.6785

Source: 1988 AACS.

R 325.6790

Source: 1988 AACS.

R 325.6795

Source: 1988 AACS.

PART 8. ENROLLEE CLINICAL RECORDS; REPORTS AND INSPECTIONS

R 325.6801
Source: 1988 AACS.

R 325.6805
Source: 1988 AACS.

R 325.6810
Source: 1988 AACS.

R 325.6815
Source: 1988 AACS.

R 325.6820
Source: 1997 AACS.

R 325.6825
Source: 1988 AACS.

R 325.6830
Source: 1988 AACS.

R 325.6835
Source: 1988 AACS.

PART 9. HEALTH MAINTENANCE ORGANIZATION INCLUSION IN HEALTH BENEFIT PLANS

R 325.6901
Source: 1988 AACS.

R 325.6905
Source: 1988 AACS.

R 325.6910
Source: 1988 AACS.

R 325.6925
Source: 1988 AACS.

R 325.6930
Source: 1988 AACS.

R 325.6935
Source: 1988 AACS.

R 325.6950
Source: 1988 AACS.

R 325.6955
Source: 1988 AACS.

R 325.6960
Source: 1988 AACS.

R 325.6965
Source: 1997 AACS.

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DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF VITAL AND HEALTH STATISTICS
DISINTERMENT—REINTERMENT

R 325.8051
Source: 1982 AACS.

R 325.8052
Source: 1982 AACS.

R 325.8053
Source: 1982 AACS.

R 325.8054
Source: 1982 AACS.

R 325.8055
Source: 1982 AACS.

R 325.8056
Source: 1982 AACS.

R 325.8057
Source: 1982 AACS.

LABORATORY AND EPIDEMIOLOGICAL SERVICES ADMINISTRATION
DISEASE SURVEILLANCE AND CONTROL

R 325.9001
Source: 1997 AACS.

R 325.9002
Source: 1997 AACS.

R 325.9003
Source: 1997 AACS.

R 325.9004
Source: 1997 AACS.

R 325.9005
Source: 1997 AACS.

R 325.9006
Source: 1997 AACS.

R 325.9007
Source: 1997 AACS.

R 325.9008
Source: 1997 AACS.

R 325.9009
Source: 1997 AACS.

R 325.9010

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Source: 1997 AACS.

R 325.9011

Source: 1997 AACS.

R 325.9012

Source: 1981 AACS.

BUREAU OF LABORATORY AND EPIDEMIOLOGICAL SERVICES
DEFINITION OF “INFECTIOUS AGENT”

R 325.9031

Source: 1987 AACS.

DIVISION OF RESEARCH AND DEVELOPMENT
CHRONIC DISEASE PREVENTION AND CONTROL LIST

R 325.9041

Source: 1989 AACS.

OFFICE OF THE STATE REGISTRAR AND
CENTER FOR HEALTH STATISTICS
CANCER REPORTING

R 325.9051

Source: 1985 AACS.

R 325.9052

Source: 1985 AACS.

R 325.9053

Source: 1985 AACS.

R 325.9054

Source: 1985 AACS.

R 325.9055

Source: 1985 AACS.

R 325.9056

Source: 1985 AACS.

R 325.9057

Source: 1985 AACS.

CENTER FOR HEALTH PROMOTION
SPINAL CORD AND TRAUMATIC BRAIN INJURY REPORTING

R 325.9061

Source: 1993 AACS.

R 325.9062

Source: 1993 AACS.

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R 325.9063
Source: 1993 AACS.

R 325.9064
Source: 1993 AACS.

R 325.9065
Source: 1993 AACS.

R 325.9066
Source: 1993 AACS.

R 325.9067
Source: 1993 AACS.

BIRTH DEFECTS REPORTING

R 325.9071
Source: 1991 AACS.

R 325.9072
Source: 1991 AACS.

R 325.9073
Source: 1991 AACS.

R 325.9074
Source: 1991 AACS.

R 325.9075
Source: 1991 AACS.

R 325.9076
Source: 1991 AACS.

HEALTH LEGISLATION AND POLICY DEVELOPMENT

BLOOD LEAD ANALYSIS REPORTING

R 325.9081
Source: 1997 AACS.

R 325.9082
Source: 1997 AACS.

R 325.9083
Source: 1997 AACS.

R 325.9084
Source: 1997 AACS.

R 325.9085
Source: 1997 AACS.

R 325.9086
Source: 1997 AACS.

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R 325.9087
Source: 1997 AACS.

BUREAU OF HEALTH SYSTEMS
CERTIFICATE OF NEED

PART 1. GENERAL PROVISIONS

R 325.9101
Source: 1996 AACS.

R 325.9103
Source: 1996 AACS.

R 325.9105
Source: 1996 AACS.

R 325.9109
Source: 1996 AACS.

R 325.9121
Source: 1996 AACS.

R 325.9123
Source: 1996 AACS.

R 325.9125
Source: 1996 AACS.

PART 2. LETTERS OF INTENT; APPLICATIONS; REVIEWS

R 325.9201
Source: 1996 AACS.

R 325.9203
Source: 1996 AACS.

R 325.9204
Source: 1996 AACS.

R 325.9205
Source: 1996 AACS.

R 325.9206
Source: 1996 AACS.

R 325.9207
Source: 1996 AACS.

R 325.9208
Source: 1996 AACS.

R 325.9215
Source: 1996 AACS.

R 325.9227
Source: 1996 AACS.

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R 325.9229
Source: 1996 AACS.

PART 3. APPROVAL AND ISSUANCE; DISAPPROVAL

R 325.9301
Source: 1996 AACS.

R 325.9303
Source: 1996 AACS.

PART 4. TERMS AND CONDITIONS

R 325.9401
Source: 1986 AACS.

R 325.9403
Source: 1996 AACS.

R 325.9413
Source: 1996 AACS.

R 325.9415
Source: 1996 AACS.

R 325.9417
Source: 1996 AACS.

R 325.9419
Source: 1996 AACS.

PART 5. ADMINISTRATIVE HEARINGS

R 325.9501
Source: 1996 AACS.

R 325.9503
Source: 1996 AACS.

R 325.9505
Source: 1986 AACS.

R 325.9507
Source: 1996 AACS.

R 325.9509
Source: 1996 AACS.

R 325.9511
Source: 1996 AACS.

R 325.9513
Source: 1996 AACS.

R 325.9515
Source: 1996 AACS.

R 325.9517

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Source: 1996 AACS.

R 325.9519

Source: 1996 AACS.

R 325.9521

Source: 1996 AACS.

R 325.9523

Source: 1996 AACS.

R 325.9525

Source: 1996 AACS.

DEPARTMENT OF COMMUNITY HEALTH
HEALTH LEGISLATION AND POLICY DEVELOPMENT
LEAD HAZARD REMEDIATION

R 325.9901

Source: 1998-2000 AACS.

R 325.9902

Source: 1998-2000 AACS.

R 325.9903

Source: 1998-2000 AACS.

R 325.9904

Source: 1998-2000 AACS.

R 325.9905

Source: 1998-2000 AACS.

R 325.9906

Source: 1998-2000 AACS.

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Source: 1998-2000 AACS.

R 325.9908

Source: 1998-2000 AACS.

R 325.9909

Source: 1998-2000 AACS.

R 325.9910

Source: 1998-2000 AACS.

R 325.9911

Source: 1998-2000 AACS.

R 325.9912

Source: 1998-2000 AACS.

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Source: 1998-2000 AACS.

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R 325.9914
Source: 1998-2000 AACS.

R 325.9915
Source: 1998-2000 AACS.

R 325.9916
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R 325.9917
Source: 1998-2000 AACS.

R 325.9918
Source: 1998-2000 AACS.

R 325.9919
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R 325.9920
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R 325.9921
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R 325.9922
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R 325.9923
Source: 1998-2000 AACS.

R 325.9924
Source: 1998-2000 AACS.

R 325.9925
Source: 1998-2000 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY
HEALTH SERVICES ADMINISTRATION
SUPPLYING WATER TO THE PUBLIC

PART 1. GENERAL PROVISIONS

R 325.10102
Source: 1998-2000 AACS.

R 325.10103 Definitions; C.

Rule 103. As used in these rules:

- (a) "C" in "CT calculation" means the residual disinfectant concentration measured in milligrams per liter in a representative sample of water.
- (b) "Casing" means a durable pipe that is placed in a well to prevent the soil from caving in and to seal off surface drainage or undesirable water, gases, contaminants, or other fluids and prevent them from entering the well and the aquifer supplying the well.
- (c) "Casing vent" means an outlet at the upper terminal of a well casing which provides atmospheric pressure in the well and which allows the escape of gases when present.
- (d) "Certificate" means a document that is issued by the department to a person who meets the qualification requirements for

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operating a waterworks system or a portion of the waterworks system.

(e) "Certified operator" means an operator who holds a certificate.

(f) "Community supply" or "community water supply" or "community water system" means a public water supply that provides year-round service to not fewer than 15 living units or that regularly provides year-round service to not fewer than 25 residents.

(g) "Complete treatment system" means a treatment system that employs disinfection, coagulation, sedimentation, and filtration units that function collectively to effect control over water quality characteristics to produce a finished water that meets the requirements of the state drinking water standards.

(h) "Compliance cycle" means the 9-year calendar year cycle during which public water systems are required to monitor. Each compliance cycle consists of 3 3-year compliance periods. The first calendar year cycle begins January 1, 1993, and ends December 31, 2001; the second begins January 1, 2002, and ends December 31, 2010; the third begins January 1, 2011, and ends December 31, 2019.

(i) "Compliance period" means a 3-year calendar year period within a compliance cycle. Each compliance cycle has 3 3-year compliance periods. Within the first compliance cycle, the first compliance period runs from January 1, 1993, to December 31, 1995; the second from January 1, 1996, to December 31, 1998; the third from January 1, 1999, to December 31, 2001.

(j) "Confluent growth" means a continuous bacterial growth that covers the entire filtration area of a membrane filter, or portion of a filtration area, in which bacterial colonies are not discrete.

(k) "Construction" means the erection, installation, or alteration of a waterworks system, or any portion of a waterworks system, that affects any of the following:

(i) Flow.

(ii) Capacity.

(iii) System service area.

(iv) Source.

(v) Treatment.

(vi) Reliability.

(l) "Contested cases" means matters that are within the definition of a contested case as set forth by section 3(3) of 1969 PA 306, MCL 24.203(3), and matters of issue that involve any of the following which are issued by the director, the department, or the division pursuant to the act and these rules:

(i) Orders.

(ii) Exemptions.

(iii) Variances.

(iv) Stipulations.

(v) Consent agreements.

(vi) Permits.

(vii) Licenses.

(viii) Certificates.

(m) "Contested case hearing" means a hearing that is initiated by the department or a person under chapters 4, 5, and 6 of 1969 PA 306, MCL 24.271 to 24.306.

(n) "Contaminant" means a physical, chemical, biological, or radiological substance or matter in water.

(o) "Contingency plan" means a plan for use by a supplier of water in the event of an emergency.

(p) "Corrosion inhibitor" means a substance that is capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

(q) "Cross connection" means a connection or arrangement of piping or appurtenances through which a backflow could occur.

(r) "CT calculation" means the product of residual disinfectant concentration (C) in milligrams per liter determined at or before the first customer and the corresponding disinfectant contact time (T) in minutes; C*T is calculated at rated capacity. The total CT shall be the sum of individual CTs of each disinfectant sequence.

(s) "Customer service connection" means the pipe between a water main and customer site piping or building plumbing system.

(t) "Customer site piping" means an underground piping system owned or controlled by the customer that conveys water from the customer service connection to building plumbing systems and other points of use on lands owned or controlled by the customer. Customer site piping does not include any system that incorporates treatment to protect public health.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1991 MR 11, Eff. Nov. 22, 1991; 1993 MR 6, Eff. July 2, 1993; 1994 MR 12, Eff. Jan. 5, 1995; 2000 MR 19 Eff. Dec. 8, 2000; 2002 MR 10, Eff. May 30, 2002.

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R 325.10104

Source: 1998-2000 AACs.

R 325.10105 Definitions; F to L.

Rule 105. As used in these rules:

- (a) "Federal act" means the safe drinking water act of 1974, 42 U.S.C. S300f et seq. and the provisions of 40 C.F.R. part 35, §35.600 to §35.630; 40 C.F.R. part 141; and 40 C.F.R. part 142 promulgated by EPA (1999) under the federal act.
 - (b) "Finished water" means water that is ready for distribution to the customers or users of a public water supply.
 - (c) "Firm capacity," as applied to wells, pumping stations, or units of treatment systems, means the production capability of each respective part of the waterworks system with the largest well, pump, or treatment unit out of service.
 - (d) "First draw sample" means a 1-liter sample of tap water which has been standing in plumbing pipes for not less than 6 hours and which is collected without flushing the tap.
 - (e) "Gravity storage tank" means an elevated or ground level finished water storage reservoir that, during normal use, operates under atmospheric pressure.
 - (f) "Ground water" or "groundwater" means the water in the zone of saturation in which all of the pore spaces of the subsurface material are filled with water.
 - (g) "Ground water under the direct influence of surface water" means any water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*, or significant and relatively rapid changes in water characteristics such as turbidity, temperature, conductivity or pH that closely correlate to climatological or surface water conditions.
 - (h) "Grout" means neat cement, concrete, or other sealing material which is approved by the department and which is used to seal a well casing in a well.
 - (i) "Imminent hazard" means that in the judgment of the director there is a violation, or a condition that may cause a violation, of the state drinking water standards at a public water supply requiring immediate action to prevent endangering the health of people.
 - (j) "Initial compliance period" means January 1993 to December 1995. For a system that has less than 150 service connections, the initial compliance period is January 1996 to December 1998 for contaminants listed in part 6 of these rules that have an effective date of January 17, 1994.
 - (k) "Large water supply" or "large water system," for the purpose of lead and copper control, means a public water supply that serves more than 50,000 persons.
 - (l) "Lead service line" means a service line which is made of lead and which connects the water main to the building inlet and any lead pigtail, gooseneck, or other fitting that is connected to the lead line.
 - (m) "License" means the license that is issued by the department to a water hauler, or for a water hauling tank, pursuant to section 18 of the act.
 - (n) "Limited treatment system" means a treatment system, including, but not limited to, disinfection, fluoridation, iron removal, ion exchange treatment, phosphate application, or filtration other than complete treatment.
 - (o) "Living unit" means a house, apartment, or other domicile occupied or intended to be occupied on a day-to-day basis by an individual, family group, or equivalent.
- History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1994 MR 12, Eff. Jan. 5, 1995; 1994 MR 12, Eff. Jan. 5, 1995; 2000 MR 19, Eff. Dec. 8, 2000; 2002 MR 10, Eff. May 30, 2002.

R 325.10106 Definitions; M to O.

Rule 106. As used in these rules:

- (a) "Maximum TTHM potential" means the maximum concentration of total trihalomethanes produced in a given water containing a disinfectant residual after 7 days at a temperature of 25 degrees Centigrade or above.
- (b) "MCL" means the maximum permissible level of a contaminant in water that is delivered to any user of a public water supply.
- (c) "MDL" means method detection limit for analytical work done to determine compliance with the act.
- (d) "Medium-size water system" or "medium-size water supply," for the purpose of lead and copper control, means a public water supply that serves more than 3,300 persons and fewer than or equal to 50,000 persons.
- (e) "Monitoring requirement" means a schedule, frequency, and location for the sampling and analysis of water that is required by the provisions of part 7 of these rules to determine whether a public water supply is in compliance with the state drinking water standards.
- (f) "Near the first service connection" means at 1 of the 20% of all service connections in the entire system that are nearest the water supply treatment facility, as measured by water transport time within the distribution system.
- (g) "Noncommunity supply" or "noncommunity water supply" or "noncommunity water system" means a public water supply

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that is not a community supply, but that has not fewer than 15 service connections or that serves not fewer than 25 individuals on an average daily basis for not less than 60 days per year.

(h) "Nontransient noncommunity water supply" or "nontransient noncommunity water system" or "NTNC" means a noncommunity supply that serves not fewer than 25 of the same individuals on an average daily basis over 6 months per year. This definition includes public water supplies in places of employment, schools, and day-care centers.

(i) "NTU" means nephelometric turbidity unit.

(j) "One hundred-year drought elevation" means the minimum projected water surface elevation that would occur at a location once in a period of 100 years.

(k) "One hundred-year flood elevation" means the maximum projected water surface elevation that would occur at a location once in a period of 100 years.

(l) "Operating shift" means that period of time during which operator decisions that affect public health are necessary for proper operation of the waterworks system.

(m) "Operator" means an individual who operates a waterworks system or a portion of a waterworks system.

(n) "Operator in charge" means a certified operator who is designated by the owner of a public water supply as the responsible individual in overall charge of a waterworks system, or portion of a waterworks system, who makes decisions regarding the daily operational activities of the system that will directly impact the quality or quantity of drinking water.

(o) "Optimal corrosion control treatment," for the purpose of lead and copper control, means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the public water supply to be in violation of any national primary drinking water regulations.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1984 MR 6, Eff. July 6,

1984; 1989 MR 8, Eff. Sept. 13, 1989; 1991 MR 11, Eff. Nov. 22, 1991; 1994 MR 12, Eff. Jan. 5, 1995; 2000 MR 19, Eff. Dec. 8, 2000; 2002 MR 10, Eff. May 30, 2002.

R 325.10107 Definitions; P, R.

Rule 107. As used in these rules:

(a) "Permit" means a public water supply construction permit that is issued to a supplier of water by the department under the provisions of section 4 of the act.

(b) "Person" means an individual, partnership, copartnership, cooperative, firm, company, public or private association or corporation, political subdivision, agency of the state, agency of the federal government, trust, estate, joint structure company, or any other legal entity, or their legal representative, agent, or assignee.

(c) "Pitless adapter" means a device or assembly of parts which permits water to pass through the wall of a well casing or extension of a well casing and which provides access to the well and to the parts of the system within the well in a manner that prevents the entrance of contaminants into the well and the water produced.

(d) "Plans and specifications" means drawings, data, and a true description or representation of an entire waterworks system or parts of the system as it exists or is to be constructed, and a statement of how a waterworks system shall be operated.

(e) "Political subdivision" means a city, village, township, charter township, county, district, authority, or portion or combination of any of the entities specified in this subdivision.

(f) "PQL" means the practical quantitation levels. The PQL is the lowest concentration that can be reliably achieved by well-operated laboratories within specified limits of precision and accuracy during routine laboratory operating conditions.

(g) "Production well" means a well that has been approved for use for a public water supply in accordance with the provisions of part 8 of these rules.

(h) "Public hearing" means a hearing which is conducted by the director of the department on matters relating to the functions and responsibilities of the division and which seeks public input relevant to such functions and responsibilities.

(i) "Public water supply" or "public water system" means a waterworks system that provides water for drinking or household purposes to persons other than the supplier of the water, and does not include either of the following:

(i) A waterworks system that supplies water to only 1 living unit.

(ii) A waterworks system that consists solely of customer site piping.

(j) "Pumping water level" means the distance measured from an established datum at or above ground level to the water surface in a well being pumped at a known rate for a known period of time.

(k) "Rated treatment capacity" is one or any combination of the following capacities when water treatment is practiced:

(i) Rated capacity from an approved surface water supply, ground water supply under the direct influence of surface water, or complete treatment system as contained in R 325.11006.

(ii) Firm capacity from an approved ground water supply where firm capacity means the production capability of each respective component of the waterworks system with the largest well, pump, or treatment unit out of service.

(iii) Available capacity obtained under contract and capable of delivery from another approved public water supply.

(l) "Raw water" means water that is obtained from a source by a public water supply before a supplier of water provides any

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treatment or distributes the water to its customers.

(m) "Regional administrator" means the EPA region V administrator.

(n) "Regulated VOCs" means a group of volatile organic chemicals for which state drinking water standards have been promulgated, but does not include total trihalomethanes.

(o) "Removed from service" means physically disconnected from the waterworks system in a manner that would prevent the inadvertent use of the well and would require specific authorization from the supplier of water to reconnect.

(p) "Repeat sample" means a sample that is collected and analyzed in response to a previous coliform-positive sample.

(q) "Resident" means an individual who owns or occupies a living unit.

(r) "Routine sample" means a water sample that is collected and analyzed to meet the monitoring requirements for total coliform, as outlined in the written sampling plan.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1989 MR 8, Eff. Sept. 13, 1989; 1991 MR 11, Eff. Nov. 22, 1991; 1994 MR 12, Eff. Jan. 5, 1995; 2000 MR 19 Eff. Dec. 8, 2000; 2002 MR 10, Eff. May 30, 2002.

R 325.10108 Definitions; S.

Rule 108. As used in these rules:

(a) "Sanitary survey" means an evaluation, including an on-site review of a waterworks system or a portion thereof, for existing or potential health hazards, including sampling, design, operation, and maintenance, for the purpose of determining the ability of the public water supply to produce, treat, and distribute adequate quantities of water meeting state drinking water standards.

(b) "Service connection" means a direct connection from a distribution water main to a living unit or other site to provide water for drinking or household purposes.

(c) "Service line sample" means a 1-liter sample of water that has been standing for not less than 6 hours in a service line.

(d) "Shift operator" means a certified operator, other than the operator in charge, who is in charge of an operating shift of a waterworks system.

(e) "Single-family structure," for the purpose of lead and copper control, means a building which is constructed as a single-family residence and which is currently used as either a residence or a place of business.

(f) "Small water supply" or "small water system," for the purpose of lead and copper control, means a public water supply that serves fewer than 3,301 persons.

(g) "SOC" means synthetic organic chemical.

(h) "Source" means the point of origin of raw water or means treated water that is purchased or obtained by a public water supply, by a water hauler, or by a person who provides bottled water.

(i) "State drinking water standards" means quality standards setting limits for contaminant levels or establishing treatment techniques to meet standards necessary to protect the public health.

(j) "Static water level" means the distance measured from an established datum at or above ground level to the water surface in a well which is not being pumped, which is not under the influence of pumping, and which is not flowing under artesian pressure.

(k) "Suction line" means a pipe or line that is connected to the inlet side of a pump or pumping equipment.

(l) "Supplier of water" or "supplier" means a person who owns or operates a public water supply, and includes a water hauler.

(m) "Surface water" means water that rests or flows on the surface of the ground.

(n) "System with a single-service connection" means a public water supply that supplies drinking water to consumers through a single-service line.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1991 MR 11, Eff. Nov. 22, 1991; 1993 MR 6, Eff. July 2, 1993; 1994 MR 12, Eff. Jan. 5, 1995; 2000 MR 19 Eff. Dec. 8, 2000; 2002 MR 10, Eff. May 30, 2002.

R 325.10109 Definitions; T to Y.

Rule 109. As used in these rules:

(a) "Test well" means a well that is drilled on a site that has not been approved for use as a production well in accordance with the provisions of part 8 of these rules.

(b) "Too numerous to count" means that the total number of bacterial colonies is more than 200 on a 47-millimeter diameter membrane filter.

(c) "Total trihalomethanes" or "TTHM" means the sum of the concentration in milligrams per liter, rounded to 2 significant figures, of all of the following:

(i) The trihalomethane compounds.

(ii) Trichloromethane (chloroform).

(iii) Dibromochloromethane.

(iv) Bromodichloromethane.

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- (v) Tribromomethane (bromoform).
- (d) "Transient noncommunity water supply" or "transient noncommunity water system" means a noncommunity supply that does not meet the definition of nontransient noncommunity water supply in R 325.10106(h).
- (e) "Treatment system" means a facility or structure and associated appurtenances installed for the purpose of treating drinking water before delivery to a distribution system.
- (f) "Treatment technique" means a minimum treatment requirement or a necessary methodology or technology that is employed by a supplier of water for the control of the chemical, physical, biological, or radiological characteristics of the public water supply.
- (g) "Trihalomethane" or "THM" means 1 of the family of organic compounds named as derivatives of methane, wherein 3 of the 4 hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure.
- (h) "Unregulated contaminants" means a group of contaminants for which state drinking water standards have not been promulgated, but for which monitoring requirements apply.
- (i) "Variance" means an order, with appropriate conditions and compliance schedules and requirements, which is issued by the director to a supplier of water and which permits a public water supply to be in noncompliance with a state drinking water standard, including a specified treatment technique.
- (j) "VOC" means volatile organic chemical.
- (k) "Water hauler" means a person engaged in bulk vehicular transportation of water to other than the water hauler's own household which is intended for use or used for drinking or household purposes. Excluded from this definition are those persons providing water solely for employee use.
- (l) "Water transportation tank" means a tank that is associated with an over-the-road vehicle that is used for the bulk transport of drinking water.
- (m) "Waterworks system" or "system" means a system of pipes and structures through which water is obtained and distributed, including, but not limited to: wells and well structures, intakes and cribs, pumping stations, treatment plants, storage tanks, pipelines and appurtenances, or a combination of the items specified in this subdivision, actually used or intended for use for the purpose of furnishing water for drinking or household purposes.
- (n) "Year-round service" means the ability of a supplier of water to provide drinking water on a continuous basis to a living unit or facility.
- History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1984 MR 6, Eff. July 6, 1984; 1989 MR 8, Eff. Sept. 13, 1989; 1991 MR 11, Eff. Nov. 22, 1991; 1993 MR 6, Eff. July 2, 1993; 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2000 MR 19 Eff. Dec. 8, 2000; 2002 MR 10, Eff. May 30, 2002.

R 325.10110

Source: 1998-2000 AACS.

R 325.10111

Source: 1998-2000 AACS.

R 325.10112 Adoption by reference.

Rule 112. The department adopts by reference the publication entitled "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," NCRP Report 22, 1963, as referred to in parts 1 and 6 of these rules. The adopted material is available from the National Council on Radiation Protection at the address in R 325.10116(c) for a cost of \$20.00 at the time of adoption of these rules. The adopted material is available for inspection, or copies are available at no cost from the offices of the department at the address in R 325.10116(a).

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1998 MR 3, Eff. Apr. 8, 1998; 2000 MR 19 Eff. Dec. 8, 2000; 2002 MR 10, Eff. May 30, 2002.

R 325.10113

Source: 1998-2000 AACS.

R 325.10116 Addresses.

Rule 116. The following are addresses and contact information of the department and other organizations referred to in these rules:

- (a) Department of Environmental Quality, Drinking Water And Radiological Protection Division, 525 West Allegan Street, Post Office Box 30630, Lansing, MI 48909-8130, Telephone 517-241-1300. Internet address: <http://www.deq.state.mi.us>.
- (b) Superintendent of Documents, United States Government Printing Office, Post Office Box 371954, Pittsburgh, PA 15250-7954, Telephone 202-512-1800. Internet address: http://www.access.gpo.gov/su_docs.

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(c) National Council On Radiation Protection, 7910 Woodmont Avenue, Suite 800, Bethesda, Maryland 20814, Telephone 301-657-2652. Internet address: <http://www.ncrp.com>.
History: 2002 MR 10, Eff. May 30, 2002.

PART 3. VARIANCES AND EXEMPTIONS

R 325.10303

Source: 1991 AACS.

R 325.10304

Source: 1991 AACS.

R 325.10306

Source: 1991 AACS.

R 325.10308a

Source: 1984 AACS.

R 325.10308b

Source: 1998-2000 AACS.

PART 4. PUBLIC NOTIFICATION AND PUBLIC EDUCATION

R 325.10401

Source: 1994 AACS.

R 325.10402

Source: 1989 AACS.

R 325.10403

Source: 1993 AACS.

R 325.10404

Source: 1991 AACS.

R 325.10405

Source: 1989 AACS.

R 325.10406

Source: 1989 AACS.

R 325.10407

Source: 1994 AACS.

R 325.10409

Source: 1989 AACS.

R 325.10410 Public education regarding lead.

Rule 410. (1) If a community water system or a nontransient noncommunity water system exceeds the lead action level based on tap water samples that are collected under R 325.10710a, then the supplier shall deliver the public education materials specified in 40 C.F.R. §§141.85(a) and (b), (January 26, 2000), which are adopted by reference. The adopted material is available from the Superintendent of Documents at the address in R 325.10116(b) for a cost of \$47.00 at the time of adoption of these rules. The adopted material is available for inspection, or copies are available at no cost from the offices of the department at the address in R 325.10116(a).

(2) In a community where more than 10% of the population speaks a language other than English, public education materials shall be communicated in the appropriate language or languages.

(3) The supplier of a community water system that exceeds the lead action level on the basis of tap water samples collected

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under R 325.10710a, and that is not already repeating public education tasks pursuant to subrules (4), (8), and (9) of this rule, shall, within 60 days, do all of the following:

(a) Insert notices in each customer's water utility bill containing the information specified in 40 C.F.R. §141.85(a)(1), together with the following alert on the water bill itself in large print: "Some homes in this community have elevated lead levels in their drinking water. Lead can pose a significant risk to your health. Please read the enclosed notice for further information." The supplier of a community water system having a billing cycle that does not include a billing within 60 days of exceeding the action level, or that cannot insert information in the water utility bill without making major changes to its billing system, may use a separate mailing to deliver the information in 40 C.F.R. §141.85(a)(1), as adopted by reference in subrule (1) of this rule, as long as the information is delivered to each customer within 60 days of exceeding the action level. The supplier shall also include the "alert" language specified in this subdivision.

(b) Submit the information specified in 40 C.F.R. §141.85(a)(1), as adopted by reference in subrule (1) of this rule, to the editorial departments of the major daily and weekly newspapers circulated throughout the community.

(c) Deliver pamphlets or brochures, or both, that contain the public education materials specified in 40 C.F.R. §§141.85(a)(1)(ii) and (iv), as adopted by reference in subrule (1) of this rule, to facilities and organizations, including all of the following:

(i) Public schools or local school boards.

(ii) City or county health department.

(iii) Women, infants, and children (WIC), or head start programs.

(iv) Public and private hospitals or clinics.

(v) Pediatricians.

(vi) Family planning clinics.

(vii) Local welfare agencies.

(d) Submit the public service announcement specified in 40 C.F.R. §141.85(b), as adopted by reference in subrule (1) of this rule, to not fewer than 5 of the radio and television stations with the largest audiences that broadcast to the community that is served by the system. For small water systems, the public service announcement may be hand delivered to each customer instead of submitting the announcement to radio and television stations.

(4) The supplier of a community water system shall repeat the tasks specified in subrule (3)(a), (b), and (c) of this rule every 12 months and the tasks specified in subrule (3)(d) of this rule every 6 months for as long as the system exceeds the lead action level.

(5) Within 60 days after a nontransient, noncommunity water system exceeds the lead action level, unless the supplier is already repeating public education tasks pursuant to subrule (6) of this rule, the supplier shall deliver the public education materials specified in the applicable provisions of 40 C.F.R. §141.85(a)(1), as adopted by reference in subrule (1) of this rule, or the public education materials specified by 40 C.F.R. §141.85(a)(2), as follows:

(a) Post informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system.

(b) Distribute informational pamphlets or brochures, or both, on lead in drinking water to each person who is served by the nontransient, noncommunity water system. The department may allow the supplier to utilize electronic transmission instead of or combined with printed materials as long as it achieves at least the same coverage.

(6) The supplier of a nontransient, noncommunity water system shall repeat the tasks specified in subrule (5) of this rule at least once during each calendar year in which the system exceeds the lead action level.

(7) A supplier may discontinue delivery of public education materials if the system subject to this rule has met the lead action level during the most recent 6-month monitoring period conducted under R 325.10710a. The supplier shall recommence public education under this rule if it subsequently exceeds the lead action level during a monitoring period.

(8) The supplier of a community water system may apply to the department, in writing, unless the department has waived the requirement for prior department approval, to use the text specified in 40 C.F.R. §141.85(a)(2), as adopted by reference in subrule (1) of this rule, instead of the text in 40 C.F.R. §141.85(a)(1) and to perform the tasks listed in subrules (5) and (6) of this rule instead of the tasks in subrules (3) and (4) of this rule if both of the following provisions are satisfied:

(a) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to plumbing or installing point of use treatment devices.

(b) The supplier provides water as part of the cost of services provided and does not separately charge for water consumption.

(9) Both of the following provisions apply to community water supplies serving 3,300 or fewer people:

(a) If a community water system serves 3,300 or fewer people, then the supplier may omit the task contained in subrule (3)(d) of this rule. As long as it distributes notices containing the information contained in 40 C.F.R. §141.85(a)(1), as adopted by reference in subrule (1) of this rule, to every household served by the system, those suppliers may further limit their public education programs as follows:

(i) If a system serves 500 or fewer people, then the supplier may forego the task contained in subrule (3)(b) of this rule. The

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supplier may limit the distribution of the public education materials required under subrule (3)(c) of this rule to facilities and organizations served by the system that are most likely to be visited regularly by pregnant women and children, unless it is notified by the department, in writing, that it shall make a broader distribution.

(ii) If a system serves 501 to 3,300 people, then the supplier, if approved by the department in writing, may omit the task in subrule (3)(b) of this rule or limit the distribution of the public education materials required under subrule (3)(c) of this rule to facilities and organizations served by the system that are most likely to be visited regularly by pregnant women and children, or may do both.

(b) The supplier of a community water system serving 3,300 or fewer people that delivers public education under subdivision (a)(i) of this subrule shall repeat the required public education tasks at least once during each calendar year in which the system exceeds the lead action level.

History: 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10411

Source: 2001 AACS.

R 325.10412

Source: 2001 AACS.

R 325.10413

Source: 2001 AACS.

R 325.10414

Source: 2001 AACS.

R 325.10415

Source: 2001 AACS.

R 325.10416

Source: 2001 AACS.

R 325.10417

Source: 2001 AACS.

R 325.10418

Source: 2001 AACS.

R 325.10419

Source: 2001 AACS.

R 325.10420

Source: 2001 AACS.

PART 5. TYPES OF PUBLIC WATER SUPPLIES

R 325.10505

Source: 1991 AACS.

R 325.10506

Source: 1991 AACS.

PART 6. STATE DRINKING WATER STANDARDS AND ANALYTICAL TECHNIQUES

R 325.10601

Source: 1998-2000 AACS.

R 325.10601a

Source: 1998-2000 AACS.

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R 325.10602

Source: 1993 AACS.

R 325.10603

Source: 1993 AACS.

R 325.10604

Source: 1998-2000 AACS.

R 325.10604a

Source: 1993 AACS.

R 325.10604b

Source: 1994 AACS.

R 325.10604c MCL for inorganic chemicals.

Rule 604c. (1) Except as specified, the MCLs and effective dates for inorganic chemicals in table 1 of this rule apply to community water systems and nontransient noncommunity water systems. The MCLs for fluoride and arsenic apply only to community water systems. The MCLs for nitrate, nitrite, and total nitrate and nitrite apply to community and noncommunity water systems.

Table 1

Contaminant	Maximum Contaminant Level in mg/l	Effective Date
Antimony	0.006	January 17, 1994.
Arsenic	0.05	June 24, 1977.
Asbestos	7 million fibers per liter (longer than 10 um)	July 30, 1992.
Barium	2	January 1, 1993.
Beryllium	0.004	January 17, 1994.
Cadmium	0.005	July 30, 1992.
Chromium	0.1	July 30, 1992.
Cyanide (as free cyanide)	0.2	January 17, 1994.
Fluoride	4	October 2, 1987.
Mercury	0.002	July 30, 1992.
Nickel	MCL withdrawn	(effective date)
Nitrate (as Nitrogen)	10	July 30, 1992.
Nitrite (as Nitrogen)	1	July 30, 1992.
Total Nitrate and Nitrite (as Nitrogen)	10	July 30, 1992.
Selenium	0.05	July 30, 1992.
Thallium	0.002	January 17, 1994.

(2) Compliance with the MCL requirements of this rule shall be determined based on the analytical results that are obtained at each sampling point as specified in R 325.10710.

(3) For suppliers that conduct monitoring more than once each year, compliance with the MCL for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is determined by a running annual average at any sampling point. If the average at any sampling point is more than the MCL, then the system is out of compliance. If any 1 sample would cause the annual average to be exceeded, then the system is out of compliance immediately. Any sample that is below the method detection limit shall be calculated at zero for the purpose of determining the annual average.

(4) For suppliers that monitor annually or less frequently, the system is out of compliance with the MCL for antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium if the level of a contaminant at any sampling point is more than the MCL. If a confirmation sample is required by the department, then the determination of compliance will be based on the average of the 2 samples.

(5) Compliance with the MCLs for nitrate and nitrite is determined based on 1 sample if the levels of these contaminants are

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below the MCLs. If the level of nitrate or nitrite or the combination of nitrate and nitrite is more than the MCLs in the initial sample, then a confirmation sample is required pursuant to the provisions of R 325.10710(9)(b) and (c), and compliance shall be determined based on the average of the initial and confirmation samples.

(6) The department may allow nitrate levels above 10 milligrams per liter but not more than 20 milligrams per liter in a noncommunity water system if the supplier demonstrates, to the satisfaction of the department, all of the following:

(a) A permanent alternate source of water meeting state drinking water standards can not be obtained.

(b) The water will not be available to children under 6 months of age.

(c) Water meeting state drinking water standards, such as bottled water, will be provided to those who request it.

(d) There is continuous posting at all drinking water outlets available to the public that nitrate levels exceed 10 mg/l and the potential health effects of exposure as specified in part 4 of these rules.

(e) Adverse health effects are not documented.

History: 1989 MR 8, Eff. Sept. 13, 1989; 1993 MR 6, Eff. July 2, 1993; 1994 MR 12, Eff. Jan. 5, 1995; 2002 MR 10, Eff. May 30, 2002.

R 325.10604d

Source: 1998-2000 AACCS.

R 325.10604e

Source: 1993 AACCS.

R 325.10604f Treatment techniques for lead and copper.

Rule 604f. (1) Treatment techniques for lead and copper are as follows:

(a) The requirements of this rule constitute the drinking water standards for lead and copper. Unless otherwise indicated, this rule applies to community water systems and nontransient, noncommunity water systems.

(b) These regulations establish a treatment technique that includes requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education. These requirements are triggered, in some cases, by lead and copper action levels measured in samples that are collected at consumers' taps.

(c) The lead action level is exceeded if the ninetieth percentile lead level is more than 0.015 milligrams per liter (mg/l) in tap water samples collected during a monitoring period conducted under R 325.10710a.

The copper action level is exceeded if the ninetieth percentile copper level is more than 1.3 mg/l in tap water samples collected during a monitoring period conducted under R 325.10710a.

The ninetieth percentile lead and copper levels shall be computed as follows:

(i) The results of all lead or copper samples taken during a monitoring period shall be placed in ascending order from the sample with the lowest concentration to the sample with the highest concentration. Each sampling result shall be assigned a number, ascending by single integers beginning with the number 1 for the sample with the lowest contaminant level. The number assigned to the sample with the highest contaminant level shall be equal to the total number of samples taken.

(ii) The number of samples taken during the monitoring period shall be multiplied by 0.9.

(iii) The contaminant concentration in the numbered sample yielded by the calculation in paragraph (ii) of this subdivision is the ninetieth percentile contaminant level.

(iv) If a total of 5 samples are collected per monitoring period, the ninetieth percentile is computed by taking the average of the highest and second highest concentrations. If fewer than 5 samples are collected, the ninetieth percentile is the highest concentration in 1 sample for purposes of this rule.

(d) A supplier shall install and operate optimal corrosion control treatment on the system under subrules (2) and (3) of this rule. A system that is in compliance with the applicable corrosion control treatment requirements specified by the department under subrules (2) and (3) of this rule is in compliance with the treatment requirement.

(e) If a system exceeds the lead or copper action level, the supplier shall implement all applicable source water treatment requirements specified by the department under subrule (4) of this rule.

(f) If a system exceeds the lead action level after implementation of applicable corrosion control and source water treatment requirements, the supplier shall complete the lead service line replacement requirements contained in subrule (5) of this rule.

(g) If a system exceeds the lead action level, the supplier shall implement the public education requirements specified in R 325.10410.

(h) Tap water monitoring for lead and copper, monitoring for water quality parameters, source water monitoring for lead and copper, and analyses of the monitoring results under this subrule shall be completed pursuant to R 325.10605, R 325.10710a, R 325.10710b, and R 325.10710c.

(i) A supplier shall report, to the department, the information required by the treatment provisions of this subrule and R 325.10710d.

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- (j) A supplier shall maintain records under R 325.11506(1)(e).
- (k) Failure to comply with the applicable requirements of this rule, R 325.10410, R 325.10710a, R 325.10710b, R 325.10710c, R 325.10605, R 325.10710d, and R 325.11506(1)(e) constitutes a violation of the drinking water standards for lead or copper, as applicable.
- (2) Corrosion control treatment steps apply to small, medium-size, and large water systems as follows:
- (a) A supplier shall complete the applicable corrosion control treatment requirements described in subrule (3) of this rule by the deadlines established in this rule. The supplier of a large water system (serving more than 50,000 persons) shall complete the corrosion control treatment steps specified in subdivision (d) of this subrule, unless the supplier is considered to have optimized corrosion control under subdivision (b)(ii) or (iii) of this subrule. The supplier of a small water system (serving 3,300 or fewer persons) or a medium-size water system (serving more than 3,300, but fewer than 50,001 persons) shall complete the corrosion control treatment steps specified in subdivision (e) of this subrule unless the supplier is considered to have optimized corrosion control under subdivision (b)(i), (ii), or (iii) of this subrule.
- (b) A supplier is considered to have optimized corrosion control and is not required to complete the applicable corrosion control treatment steps identified in subrule (3) of this rule if the system is in compliance with 1 of the criteria specified in paragraphs (i) through (iii) of this subdivision. A supplier which is considered to have optimized corrosion control under this subdivision and which has treatment in place shall continue to operate and maintain optimal corrosion control treatment and meet the requirements that the department determines appropriate to ensure optimal corrosion control treatment is maintained. All of the following provisions apply to being considered to have optimized corrosion control:
- (i) A supplier of a small or medium-size water system is considered to have optimized corrosion control if the system is in compliance with the lead and copper action levels during each of 2 consecutive 6-month monitoring periods during which monitoring is conducted under R 325.10710a.
- (ii) A supplier may be considered by the department to have optimized corrosion control treatment if the supplier demonstrates, to the satisfaction of the department, that it has conducted activities equivalent to the corrosion control steps applicable to the system under subrule (3) of this rule. Suppliers considered to have optimized corrosion control under this subdivision shall operate in compliance with the department-designated optimal water quality control parameters under subrule (3)(f) of this rule and continue to conduct lead and copper tap and water quality parameter sampling under R 325.10710a(4)(c) and R 325.10710b(4), respectively. A supplier shall provide the department with all of the following information to support a determination under this subdivision:
- (A) The results of all test samples collected for each of the water quality parameters specified in subrule (3)(c)(iii) of this rule.
- (B) A report that explains the test methods used by the supplier to evaluate the corrosion control treatments listed in subrule (3) of this rule, the results of all tests conducted, and the basis for the supplier's selection of optimal corrosion control treatment.
- (C) A report that explains how corrosion control has been installed and how it is being maintained to ensure minimal lead and copper concentrations at consumers' taps.
- (D) The results of tap water samples collected under R 325.10710a at least once every 6 months for 1 year after corrosion control has been installed.
- (iii) A supplier is considered to have optimized corrosion control for the system if it submits results of tap water monitoring conducted under R 325.10710a and source water monitoring conducted under R 325.10710c that demonstrates, for 2 consecutive 6-month monitoring periods, that the difference between the ninetyth percentile tap water lead level computed under subrule (1)(c) of this rule and the highest source water lead concentration is less than the practical quantitation level for lead. In addition, all of the following provisions apply:
- (A) A supplier of a system where the highest source water lead level is below the method detection limit is considered to have optimized corrosion control under this paragraph if the system's ninetyth percentile tap water lead level is less than or equal to the practical quantitation level for lead for 2 consecutive 6-month monitoring periods.
- (B) A supplier considered to have optimized corrosion control under this paragraph shall continue monitoring for lead and copper at the tap not less frequently than once every 3 calendar years using the reduced number of sites specified in R 325.10710a(3) and collecting the samples at times and locations specified in R 325.10710a(4)(d)(iv).
- (C) A supplier considered to have optimized corrosion control pursuant to this subdivision shall notify the department, in writing, pursuant to R 325.10710d(a)(iii) of a change in treatment or the addition of a new source. The department may require the supplier to conduct additional monitoring or to take other action the department considers appropriate consistent with the requirements of R 325.10604f(2) to ensure that the supplier maintains minimal levels of corrosion in the distribution system.
- (D) As of July 12, 2001, a supplier is not considered to have optimized corrosion control under this subdivision, and shall implement corrosion control treatment pursuant to subparagraph (E) of this paragraph unless it meets the copper action level.
- (E) A supplier that is no longer considered to have optimized corrosion control under this subdivision shall implement

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corrosion control treatment under the deadlines in subdivision (e) of this subrule. The supplier of a large water system shall adhere to the schedule specified in that subdivision for medium-size water systems, with the time periods for completing each step being triggered by the date the supplier is no longer considered to have optimized corrosion control under this subdivision.

(c) If a small or medium-size water system exceeds the lead or copper action level and the supplier is required to perform the corrosion control treatment steps, the supplier may cease completing the treatment steps when the system is in compliance with both action levels during each of 2 consecutive monitoring periods conducted under R 325.10710a and the supplier submits the results to the department. If the system thereafter exceeds the lead or copper action level during a monitoring period, the supplier shall recommence the applicable treatment steps beginning with the first treatment step that was not previously completed in its entirety. The department may require a supplier to repeat treatment steps that were previously completed by the supplier if the department determines that this is necessary to properly implement the treatment requirements of this rule. If a small or medium-size water system exceeds the lead or copper action level, the supplier, including suppliers considered to have optimized corrosion control under subdivision (b) of this subrule, shall implement corrosion control treatment steps under subdivision (e) of this subrule.

(d) Except as provided in subdivisions (b)(ii) and (iii) of this subrule, a supplier of a large water system shall complete all of the following corrosion control treatment steps by the indicated dates:

(i) Step 1: A supplier shall conduct initial monitoring during 2 consecutive 6-month monitoring periods by January 1, 1993.

(ii) Step 2: A supplier shall complete corrosion control studies by July 1, 1994.

(iii) Step 3: By January 1, 1997, a supplier shall install optimal corrosion control treatment as designated by the department.

(iv) Step 4: A supplier shall complete follow-up sampling by January 1, 1998.

(v) Step 5: A supplier shall operate in compliance with the department-specified optimal water quality control parameters and continue to conduct tap sampling.

(e) Except as provided in subdivision (b) of this subrule, the suppliers of small and medium-size water systems shall complete all of the following corrosion control treatment steps by the indicated time periods:

(i) Step 1: A supplier shall conduct initial tap sampling until the system either exceeds the lead or copper action level or becomes eligible for reduced monitoring. The supplier of a system that exceeds the lead or copper action level shall recommend optimal corrosion control treatment within 6 months after the system exceeds 1 of the action levels.

(ii) Step 2: Within 12 months after a system exceeds the lead or copper action level, the department may require the supplier to perform corrosion control studies.

(iii) Step 3: If the department requires a supplier to perform corrosion control studies, the supplier shall complete the studies within 18 months after the department requires that the studies be conducted.

(iv) Step 4: A supplier shall install optimal corrosion control treatment within 24 months after the department designates the treatment.

(v) Step 5: A supplier shall complete follow-up sampling within 36 months after the department designates optimal corrosion control treatment.

(vi) Step 6: A supplier shall operate in compliance with the department-designated optimal water quality control parameters and continue to conduct tap sampling.

(3) A supplier shall complete all the corrosion control treatment requirements described in this subrule that are applicable to the system under subrule (2) of this rule:

(a) Based on the results of lead and copper tap monitoring and water quality parameter monitoring, the suppliers of small and medium-size water systems that exceed the lead or copper action level shall recommend the installation of 1 or more of the corrosion control treatments listed in subdivision (c)(i) of this subrule that the supplier believes constitutes optimal corrosion control for that system. The department may require the supplier to conduct additional water quality parameter monitoring under R 325.10710b(4) to assist the department in reviewing the supplier's recommendation.

(b) When required by the department, the supplier of a small or medium-size water system that exceeds the lead or copper action level shall perform corrosion control studies under subdivision (c) of this subrule to identify optimal corrosion control treatment for the system.

(c) Perform corrosion control studies as follows:

(i) A supplier that performs corrosion control studies shall evaluate the effectiveness of each of the following treatments and, if appropriate, combinations of the following treatments to identify the optimal corrosion control treatment for that system:

(A) Alkalinity and pH adjustment.

(B) Calcium hardness adjustment.

(C) The addition of a phosphate or silicate-based corrosion inhibitor at a concentration sufficient to maintain an effective residual concentration in all test tap samples.

(ii) The supplier shall evaluate each of the corrosion control treatments using pipe rig/loop tests, metal coupon tests, partial-system tests, or analyses based on documented analogous treatments with other systems of similar size, water

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chemistry, and distribution system configuration.

(iii) A supplier shall measure all of the following water quality parameters in tests conducted under this paragraph before and after evaluating the corrosion control treatments listed in paragraph (i)(A) to (C) of this subdivision:

- (A) Lead.
- (B) Copper.
- (C) pH.
- (D) Alkalinity.
- (E) Calcium.
- (F) Conductivity.
- (G) Orthophosphate, when an inhibitor containing a phosphate compound is used.
- (H) Silicate, when an inhibitor containing a silicate compound is used.
- (I) Water temperature.

(iv) The supplier shall identify all chemical or physical constraints that limit or prohibit the use of a particular corrosion control treatment and shall document the constraints with 1 or both of the following:

(A) Data and documentation demonstrating that a particular corrosion control treatment has adversely affected other water treatment processes when used by another system with comparable water quality characteristics.

(B) Data and documentation demonstrating that the supplier has previously attempted to evaluate a particular corrosion control treatment and has found that the treatment is ineffective or adversely affects other water quality treatment processes.

(v) A supplier shall evaluate the effect of the chemicals used for corrosion control treatment in other water quality treatment processes.

(vi) On the basis of an analysis of the data generated during each evaluation, a supplier shall recommend, to the department, in writing, the treatment option that the corrosion control studies indicate constitutes optimal corrosion control treatment for that system. The supplier shall provide a rationale for its recommendation together with all supporting documentation specified in paragraphs (i) to (v) of this subdivision.

(d) Department designation of optimal corrosion control treatment shall be as follows:

(i) Based on consideration of available information, including, where applicable, studies performed under subdivision (c) of this subrule and a supplier's recommended treatment alternative, the department will either approve the corrosion control treatment option recommended by the supplier or will designate alternative corrosion control treatment from the treatment specified in subdivision (c)(i) of this subrule. When designating optimal treatment, the department shall consider the effects that additional corrosion control treatment will have on water quality parameters and on other water quality treatment processes.

(ii) If the department requests additional information to aid its review, the supplier shall provide the information.

(e) Each supplier shall properly install and operate, throughout its distribution system, the optimal corrosion control treatment designated by the department.

(f) All suppliers optimizing corrosion control shall continue to operate and maintain optimal corrosion control treatment, including maintaining water quality parameters at or above minimum values or within ranges designated by the department, under this subdivision for all samples collected under R 325.10710b(6) through (8). Compliance with the requirements of this subdivision shall be determined every 6 months, as specified under R 325.10710b(6). A system is out of compliance with the requirements of this subdivision for a 6-month period if it has excursions for a department-specified parameter on more than 9 days during the period. An excursion occurs when the daily value for 1 or more of the water quality parameters measured at a sampling location is below the minimum value or outside the range designated by the department. The department may delete results of obvious sampling errors from this calculation. Daily values are calculated as follows:

(i) On days when more than 1 measurement for the water quality parameter is collected at the sampling location, the daily value shall be the average of all results collected during the day regardless of whether they are collected through continuous monitoring, grab sampling, or a combination of both.

(ii) On days when only 1 measurement for the water quality parameter is collected at the sampling location, the daily value shall be the result of that measurement.

(iii) On days when a measurement is not collected for the water quality parameter at the sampling location, the daily value shall be the daily value calculated on the most recent day on which the water quality parameter was measured at the sample site.

(g) The department's determination of the optimal corrosion control treatment specified in subdivision (d) of this subrule or optimal water quality control parameters may be modified by the department. If a request for modification is by a supplier or other interested person, the request shall be in writing, shall explain why the modification is appropriate, and shall provide supporting documentation. The department may modify its determination where it concludes that a change is necessary to ensure that the supplier continues to optimize corrosion control treatment.

(4) A supplier shall complete the applicable source water monitoring and treatment requirements by the following deadlines:

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(a) The deadlines for completing source water treatment steps are as follows:

(i) Step 1: The supplier of a system that exceeds the lead or copper action level shall complete lead and copper source water monitoring and make a treatment recommendation to the department within 6 months after exceeding the lead or copper action level.

(ii) Step 2: If the department requires installation of source water treatment, the supplier shall install the treatment within 24 months after the date of written notification by the department.

(iii) Step 3: The supplier shall complete follow-up tap water monitoring and source water monitoring within 36 months after the date of written notification by the department.

(iv) Step 4: A supplier shall operate a system in compliance with the department-specified maximum permissible lead and copper source water levels and shall continue source water monitoring.

(b) Source water treatment requirements are as follows:

(i) The supplier of a system that exceeds the lead or copper action level shall recommend, in writing, to the department, the installation and operation of 1 of the source water treatments listed in paragraph (ii) of this subdivision. A supplier may recommend that no treatment be installed based on a demonstration that source water treatment is not necessary to minimize lead and copper levels at users' taps.

(ii) If the department determines that source water treatment is needed to minimize lead or copper levels in water that is delivered to users' taps, the department will either require installation and operation of the source water treatment recommended by the supplier or require the installation and operation of another source water treatment from among the following alternatives:

(A) Ion exchange.

(B) Reverse osmosis.

(C) Lime softening.

(D) Coagulation/filtration.

If the department requests additional information to aid in its review, the supplier shall provide the information by the date specified by the department in its request.

(iii) A supplier shall properly install and operate the source water treatment designated by the department under paragraph (ii) of this subdivision.

(iv) A supplier shall maintain lead and copper levels below the maximum permissible concentrations designated by the department at each sampling point monitored under R 325.10710c. A system is out of compliance with this subrule if the level of lead or copper at a sampling point is more than the maximum permissible concentration designated by the department.

(v) Upon its own initiative or in response to a request by a supplier or other interested person, the department may modify its determination of the source water treatment or maximum permissible lead and copper concentrations for finished water entering the distribution system. A request for modification by a supplier or other interested person shall be in writing, explain why the modification is appropriate, and provide supporting documentation. The department may modify its determination where it concludes that a change is necessary to ensure that the supplier continues to minimize lead and copper concentrations in source water.

(5) Lead service line replacement requirements are as follows:

(a) A supplier of a system that exceeds the lead action level in tap samples taken pursuant to R 325.10710a(4)(b) after installing corrosion control or source water treatment, or both, whichever sampling occurs later, shall replace lead service lines under the requirements of this subrule. If a supplier is in violation of subrule (2) or (4) of this rule for failure to install source water or corrosion control treatment, then the department may require the supplier to commence lead service line replacement after the date that the supplier was required to conduct monitoring under R 325.10710a(4)(b).

(b) Annually, a supplier shall replace not less than 7% of the initial number of lead service lines in its distribution system. The initial number of lead service lines is the number of lead lines in place when the replacement program begins. The supplier shall identify the initial number of lead service lines in its distribution system, including an identification of the portion or portions owned by the system, based on a materials evaluation, including the evaluation required under R 325.10710a(1) and relevant legal authorities, for example, contracts and local ordinances, regarding the portion owned by the system. The first year of lead service line replacement shall begin on the date that the action level was exceeded in tap sampling referenced in subdivision (a) of this subrule.

(c) A supplier is not required to replace an individual lead service line if the lead concentration in all service line samples from that line, taken under R 325.10710a(2)(c), is less than or equal to 0.015 mg/l.

(d) A supplier shall replace that portion of the lead service line that the system owns. If the system does not own the entire lead service line, the supplier shall notify the owner of the line, or the owner's authorized agent, that the supplier will replace the portion of the service line that it owns and shall offer to replace the owner's portion of the line. A supplier is not required to bear the cost of replacing the privately owned portion of the line, nor is it required to replace the privately owned portion

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where the owner chooses not to pay the cost of replacing the privately owned portion of the line, or where replacing the privately owned portion would be precluded by state, local, or common law. A supplier that does not replace the entire length of the service line also shall complete both of the following tasks:

(i) Not less than 45 days before commencing with the partial replacement of a lead service line, the supplier shall provide notice to the resident or residents of all buildings served by the line explaining that they may experience a temporary increase of lead levels in their drinking water, along with guidance on measures consumers can take to minimize their exposure to lead. The supplier may provide notice under the previous sentence less than 45 days before commencing partial lead service line replacement where the replacement is in conjunction with emergency repairs. In addition, the supplier shall inform the resident or residents served by the line that the supplier will, at the supplier's expense, collect a sample from each partially replaced lead service line that is representative of the water in the service line for analysis of lead content, as prescribed under R 325.10710a(2)(c), within 72 hours after the completion of the partial replacement of the service line. The supplier shall collect the sample and report the results of the analysis to the owner and the resident or residents served by the line within 3 business days of receiving the results. Mailed notices postmarked within 3 business days of receiving the results are satisfactory.

(ii) The supplier shall provide the information required by paragraph (i) of this subdivision to the residents of individual dwellings by mail or by other methods approved by the department. If multifamily dwellings are served by the line, the supplier shall have the option to post the information at a conspicuous location.

(e) A supplier may cease replacing lead service lines when first-draw samples collected under R 325.10710a(2)(b) meet the lead action level during each of 2 consecutive monitoring periods and the supplier submits the results to the department. If the first-draw samples thereafter exceed the lead action level, the supplier shall recommence replacing lead service lines under subdivision (b) of this subrule.

(f) To demonstrate compliance with subdivisions (a) to (d) of this subrule, a supplier shall report the information specified in R 325.10710d(e) to the department.

History: 1994 MR 12, Eff. Jan. 5, 1995; 2002 MR 10, Eff. May 30, 2002.

R 325.10605

Source: 1998-2000 AACS.

R 325.10605a

Source: 1998-2000 AACS.

R 325.10605b

Source: 1998-2000 AACS.

R 325.10605c

Source: 1998-2000 AACS.

R 325.10605d

Source: 1998-2000 AACS.

R 325.10605e

Source: 1998-2000 AACS.

R 325.10606

Source: 1998-2000 AACS.

R 325.10607

Source: 1998-2000 AACS.

R 325.10608

Source: 1998-2000 AACS.

R 325.10609

Source: 1998-2000 AACS.

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R 325.10702

Source: 1991 AACS.

R 325.10705 Collection and analysis of samples for coliform bacteria; community water systems.

Rule 705. (1) A supplier of water of a community water system shall collect samples of water to be analyzed for the presence of coliform bacteria at sites which are representative of water throughout the distribution system according to a written sample siting plan that is subject to department review and revision.

(2) The monitoring frequency for total coliforms for a community water system is based on the population served by the system as set forth in table 1 of this rule:

Table 1 Total Coliform Monitoring Frequency for Community Water Supplies

Population Served	Minimum Number of Samples Per Month
25 to 1,000 *	1
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180
450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270
970,001 to 1,230,000	300
1,230,001 to 1,520,000	330
1,520,001 to 1,850,000	360
1,850,001 to 2,270,000	390
2,270,001 to 3,020,000	420
3,020,001 to 3,960,000	450
3,960,001 or more	480

* Includes public water supplies which have not less than 15 service connections, but which serve fewer than 25 persons.

(3) If a community water system that serves 25 to 1,000 persons does not have a history of total coliform contamination in its

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current configuration and a sanitary survey conducted in the past 5 years shows that the system is supplied solely by a protected groundwater source and is free of sanitary defects, the department may reduce the monitoring frequency specified in table 1 of this rule, except that the department shall not reduce the monitoring frequency to less than 1 sample per quarter. To be valid, the reduced monitoring frequency shall be approved, in writing, by the department.

(4) Suppliers of water for all community water systems and noncommunity water systems shall collect samples at regular time intervals throughout the monitoring period, except for those groundwater supplies which serve fewer than 4,901 persons and which are not influenced by surface water. Groundwater suppliers that serve fewer than 4,901 persons may collect all required samples on a single day if the samples are taken from different sites.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1991 MR 11, Eff. Nov. 22, 1991; 1993 MR 6, Eff. July 2, 1993; 2002 MR 10, Eff. May 30, 2002.

R 325.10706

Source: 1993 AACS.

R 325.10707

Source: 1991 AACS.

R 325.10707a

Source: 1998-2000 AACS.

R 325.10707b

Source: 1991 AACS.

R 325.10708

Source: 1991 AACS.

R 325.10709

Source: 1998-2000 AACS.

R 325.10710 Collection and analysis of samples for inorganic chemicals.

Rule 710. (1) Suppliers of water of community water systems and noncommunity water systems shall collect water samples and cause analyses to be made for inorganic chemicals to determine compliance with the state drinking water standards as set forth in R 325.10604c. Suppliers shall monitor at the time designated by the department during each compliance period.

(2) The department may require samples to be collected and analyzed at a prescribed frequency for inorganic chemicals for type III public water supplies.

(3) Beginning in the initial compliance period, suppliers of community water systems and nontransient, noncommunity water systems shall monitor under this rule to determine compliance with the MCLs for inorganic contaminants outlined in R 325.10604c. Beginning in the initial compliance period, suppliers of transient, noncommunity water systems shall monitor under this rule to determine compliance with the nitrate, nitrite, and total nitrate and nitrite MCLs in R 325.10604c.

(4) Suppliers shall monitor as follows:

(a) Suppliers of water from groundwater systems shall take a minimum of 1 sample at every entry point to the distribution system representative of each well after treatment. The supplier shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(b) Suppliers of water from surface water systems, or combined surface water and groundwater systems, shall take a minimum of 1 sample at every entry point to the distribution system after any application of treatment or in the distribution system at a sampling point that is representative of each source after treatment. The supplier shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(c) If a system draws water from more than 1 source and the sources are combined before distribution, the supplier shall sample at an entry point to the distribution system during periods when water is representative of all sources being used.

(d) The total number of samples that shall be analyzed to meet the requirements of this rule may be reduced by the department when compositing of samples is utilized. Provisions for compositing of samples are as follows:

(i) Composite samples from a maximum of 5 sampling points are allowed.

(ii) Compositing of samples shall be done in the laboratory.

(iii) If the concentration in the composite sample is greater than or equal to 1/5 of the MCL of any inorganic chemical, then a follow-up sample shall be collected within 14 days from each sampling point included in the composite. These samples shall be analyzed for the contaminants that exceeded 1/5 of the MCL in the composite sample.

(iv) Compositing shall only be performed using samples from within a single water system.

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- (v) If duplicates of the original sample taken from each sampling point used in the composite are available, then the supplier may use these instead of resampling. The duplicates shall be analyzed and the results reported to the department within 14 days of collection.
- (5) The monitoring frequency conducted to determine compliance with the MCLs in R 325.10604c for antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium shall be as follows:
- (a) Suppliers of water of groundwater systems shall take 1 sample at each sampling point during each compliance period. Suppliers of water of surface water systems or combined surface water and groundwater systems shall take 1 sample annually at each sampling point.
- (b) A supplier of water may apply to the department for a waiver from the monitoring frequencies specified in subdivision (a) of this subrule. The department may grant a waiver for monitoring cyanide if the department determines the system is not vulnerable due to the lack of any industrial source of cyanide. Waiver provisions are as follows:
- (i) A supplier shall take a minimum of 1 sample while the waiver is effective.
- (ii) The term during which a waiver is effective shall not be more than 1 compliance cycle.
- (iii) A waiver may be granted if a surface water supplier has monitored annually for not less than 3 years or a groundwater supplier has conducted not less than 3 rounds of monitoring. At least 1 sample shall have been taken since January 1, 1990. Both surface and groundwater suppliers shall demonstrate that all previous analytical results were less than the MCL. Supplies that use a new water source are not eligible for a waiver until 3 rounds of monitoring from the new source have been completed.
- (iv) The department shall consider all of the following factors to determine the appropriate reduced monitoring frequency:
- (A) Reported concentrations from all previous monitoring.
- (B) The degree of variation in reported concentrations.
- (C) Other factors that may affect contaminant concentrations, such as changes in any of the following:
- (1) Groundwater pumping rates.
- (2) The system's configuration.
- (3) The system's operating procedures.
- (4) Stream flows or characteristics.
- (v) A waiver shall be in writing and shall set forth the basis for the determination. The determination may be initiated by the department or upon an application by the public water supplier specifying the basis for its request. The department may revise the determination based on new data.
- (c) Suppliers of systems exceeding the MCLs in R 325.10604c shall monitor quarterly beginning in the next quarter after the violation occurred. The department may decrease the quarterly monitoring requirement to the frequencies specified in subdivisions (a) and (b) of this subrule if it has determined that the system is reliably and consistently below the MCL. A groundwater supplier shall take not less than 2 quarterly samples and a surface water supplier shall take not less than 4 quarterly samples before the department's determination.
- (6) The monitoring frequency conducted to determine compliance with the MCL in R 325.10604c for asbestos shall be as follows:
- (a) Suppliers of each community water system and nontransient, noncommunity water system shall monitor for asbestos during the first 3-year compliance period of each 9-year compliance cycle beginning in the compliance period starting January 1, 1993.
- (b) If the supplier believes its water is not vulnerable to either asbestos contamination in its source water or asbestos contamination due to corrosion of asbestos-cement pipe, or both, it may apply to the department for a waiver of the monitoring requirement in subdivision (a) of this subrule. If the department grants the waiver, the supplier is not required to monitor. A waiver remains in effect until the completion of the 3-year compliance period. The department may grant a waiver based on a consideration of both of the following factors:
- (i) Potential asbestos contamination of the water source.
- (ii) The use of asbestos-cement pipe for finished water distribution and the corrosive nature of the water.
- (c) A supplier of a system vulnerable to asbestos contamination due solely to the corrosion of asbestos-cement pipe shall take 1 sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.
- (d) A supplier of a system vulnerable to asbestos contamination due solely to source water shall monitor under subrule (4) of this rule.
- (e) A supplier of a system vulnerable to asbestos contamination due both to its source water supply and corrosion of asbestos-cement pipe shall take 1 sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.
- (f) A supplier of a system exceeding the MCLs in R 325.10604c shall monitor quarterly beginning in the next quarter after a violation occurred.
- (g) The quarterly monitoring requirement may be decreased by the department to the frequency specified in subdivision (a) of

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this subrule if the department determines that the system is reliably and consistently below the MCL. A groundwater supplier shall take a minimum of 2 quarterly samples and a surface water or combined surface water and groundwater supplier shall take a minimum of 4 quarterly samples before this determination.

(h) If monitoring data collected after January 1, 1990, are generally consistent with the requirements of this subrule, then that data may be used to satisfy the monitoring requirement for the initial compliance period beginning January 1, 1993.

(7) The monitoring frequency conducted to determine compliance with the MCLs in R 325.10604c for nitrate shall be as follows:

(a) Community water systems and nontransient, noncommunity water systems served by groundwater systems shall be monitored annually. Systems served by surface water shall be monitored quarterly.

(b) For community water systems and nontransient, noncommunity water systems, the repeat monitoring frequency for groundwater systems shall be quarterly for at least 1 year following any 1 sample in which the concentration is 50% or more of the MCL. The sampling frequency for groundwater systems may be reduced by the department to annually after 4 consecutive quarterly samples are reliably and consistently less than the MCL.

(c) For community water systems and nontransient, noncommunity water systems, the department may allow a surface water supplier to reduce the sampling frequency to annually if all analytical results from 4 consecutive quarters are less than 50% of the MCL. A surface water supplier shall return to quarterly monitoring if any 1 sample is 50% or more of the MCL.

(d) Suppliers of transient, noncommunity water systems shall monitor annually.

(e) After the initial round of quarterly sampling is completed, suppliers of community water systems and nontransient, noncommunity water systems that are monitored annually shall take subsequent samples during the quarter or quarters which previously resulted in the highest analytical result.

(8) The monitoring frequency conducted to determine compliance with the MCLs in R 325.10604c for nitrite shall be as follows:

(a) A supplier of a community water system or a noncommunity water system shall take 1 sample at each sampling point in the compliance period beginning January 1, 1993, and ending December 31, 1995.

(b) After the initial sample, suppliers of systems where an analytical result for nitrite is less than 50% of the MCL shall monitor at the frequency specified by the department.

(c) The repeat monitoring frequency for a system shall be quarterly for at least 1 year following any 1 sample in which the concentration is 50% or more of the MCL. The department may allow a supplier to reduce the sampling frequency to annually after determining the system is reliably and consistently less than the MCL.

(d) Suppliers monitoring annually shall take each subsequent sample during the quarter or quarters that previously resulted in the highest analytical result.

(9) Confirmation samples are required as follows:

(a) Where the results of sampling for any of the following indicate a level that is more than the MCL, the department may require that 1 additional sample be collected as soon as possible after the initial sample was taken, but not more than 2 weeks later, at the same sampling point:

(i) Asbestos.

(ii) Antimony.

(iii) Barium.

(iv) Beryllium.

(v) Cadmium.

(vi) Chromium.

(vii) Cyanide.

(viii) Fluoride.

(ix) Mercury.

(x) Nickel.

(xi) Selenium.

(xii) Thallium.

(b) Where nitrate or nitrite sampling results indicate a level that is more than the MCL, the supplier shall take a confirmation sample within 24 hours of the supplier's receipt of notification of the analytical results of the first sample. Suppliers that are unable to comply with the 24-hour sampling requirement shall immediately notify the persons served by the area served by the public water system under part 4 of these rules and shall analyze a confirmation sample within 2 weeks of notification of the analytical results of the first sample.

(c) If a confirmation sample required by the department is taken for any contaminant, then the results of the initial and confirmation sample shall be averaged. The resulting average shall be used to determine the system's compliance under R 325.10604c(2), (3), (4), and (5). Results of obvious sampling errors may be deleted by the department.

(d) The department may require more frequent monitoring than specified in this rule or may require confirmation samples for

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positive or negative results.

(e) Suppliers may apply to the department to conduct more frequent monitoring than the minimum monitoring frequencies specified in this rule.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1993 MR 6, Eff. July 2, 1993; 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10710a Monitoring requirements for lead and copper in tap water.

Rule 710a. (1) Sample site location provisions for lead and copper monitoring in tap water are as follows:

(a) By the applicable date for the commencement of monitoring under subrule (4)(a) of this rule, each supplier shall complete a materials evaluation of its distribution system to identify a pool of targeted sampling sites that is in compliance with the requirements of this rule and that is large enough to ensure that the supplier can collect the number of lead and copper tap samples required under subrule (3) of this rule. All sites from which first draw samples are collected shall be selected from the pool of targeted sampling sites. Sampling sites may include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants only if the devices have been approved by the department for the purpose of optimizing corrosion control.

(b) A supplier shall use the information on lead, copper, and galvanized steel that it is required to collect under 40 C.F.R. §141.42(d), December 5, 1994, (Special Monitoring for Corrosivity Characteristics) when conducting a materials evaluation. When an evaluation of the information collected under 40 C.F.R. §141.42(d), is insufficient to locate the requisite number of lead and copper sampling sites that are in compliance with the targeting criteria in this subrule, the supplier shall review the sources of information listed in paragraphs (i) to (iii) of this subdivision to identify a sufficient number of sampling sites. The provisions of 40 C.F.R. §141.42(d), December 5, 1994, are adopted by reference. The adopted material is available from the Superintendent of Documents at the address in R 325.10116(b) for a cost of \$47.00 at the time of adoption of these rules. The adopted material is available for inspection, or copies are available at no cost from the offices of the department at the address in R 325.10116(a). In addition, the supplier shall collect all of the following information, where possible, in the course of its normal operations, for example, checking service line materials when reading water meters or performing maintenance activities:

(i) All plumbing codes, permits, and records in the files of the building department or departments that indicate the plumbing materials installed within publicly and privately owned structures connected to the distribution system.

(ii) All inspections and records of the distribution system that indicate the material composition of the service connections connecting a structure to the distribution system.

(iii) All existing water quality information, which includes the results of all prior analyses of the system or individual structures connected to the system, that indicates locations which may be particularly susceptible to high lead or copper concentrations.

(c) The sampling sites selected for a community water system's sampling pool (tier 1 sampling sites) shall consist of single-family structures to which either or both of the following provisions apply:

(i) The structures contain copper pipes soldered with lead and installed after 1982 or that contain lead pipes.

(ii) The structures are served by a lead service line. When multiple-family residences comprise not less than 20% of the structures served by a system, the supplier may include these types of structures in its sampling pool.

(d) For a community water system that has insufficient tier 1 sampling sites, the sampling pool shall be completed with tier 2 sampling sites, that consist of buildings, including multiple-family residences to which either or both of the following provisions apply:

(i) The structures contain copper pipes soldered with lead and installed after 1982 or that contain lead pipes.

(ii) The structures are served by a lead service line.

(e) For a community water system that has insufficient tier 1 and tier 2 sampling sites, the sampling pool shall be completed with tier 3 sampling sites, that consist of single-family structures containing copper pipes soldered with lead and installed before 1983. The supplier of a community water system with insufficient tier 1, tier 2, and tier 3 sampling sites shall complete its sampling pool with representative sites throughout the distribution system. For purposes of this subrule, a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the system.

(f) The sampling sites selected for a nontransient, noncommunity water system (tier 1 sampling sites) shall consist of buildings to which either or both of the following provisions apply:

(i) The structures contain copper pipes soldered with lead and installed after 1982 or that contain lead pipes.

(ii) The structures are served by a lead service line.

(g) The supplier of a nontransient, noncommunity water system that has insufficient tier 1 sites shall complete its sampling pool with sampling sites containing copper pipes soldered with lead and installed before 1983. If additional sites are needed to complete the sampling pool, the supplier of a nontransient noncommunity water system shall use representative sites

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throughout the distribution system. For purposes of this subrule, a representative site is a site in which the plumbing materials used at that site would be commonly found at other sites served by the system.

(h) If a distribution system contains lead service lines, the supplier shall draw 50% of the samples collected during each monitoring period from sites that contain lead pipes or copper pipes with lead solder and 50% of the samples from sites served by a lead service line. A supplier that cannot identify a sufficient number of sampling sites that are served by a lead service line shall collect first-draw tap samples from all of the sites identified as being served by lead service lines and shall complete its sampling pool in compliance with subdivisions (c) to (g) of this subrule.

(2) Sample collection methods provisions for lead and copper monitoring in tap water are as follows:

(a) All tap samples for lead and copper collected in compliance with this subrule, with the exception of lead service line samples collected under R 325.10604f(5)(c), and samples collected under subdivision (e) of this subrule, shall be first-draw samples.

(b) Each first-draw tap sample for lead and copper shall be 1 liter in volume and have stood motionless in the plumbing system of each sampling site for not less than 6 hours. First-draw samples from residential housing shall be collected from the cold-water kitchen tap or bathroom sink tap. First-draw samples from a nonresidential building shall be 1 liter in volume and shall be collected at an interior tap from which water is typically drawn for consumption. Non-first-draw samples collected instead of first-draw samples pursuant to subdivision (e) of this subrule shall be 1 liter in volume and shall be collected at an interior tap from which water is typically drawn for consumption. First-draw samples may be collected by the supplier or the supplier may allow residents to collect first-draw samples after instructing the residents about the sampling procedures specified in this subdivision. To avoid problems of residents handling nitric acid, acidification of first-draw samples may be done up to 14 days after the sample is collected. After acidification to resolubilize the metals, the sample shall stand in the original container for the time specified in the approved epa method before the sample can be analyzed. If a supplier allows residents to perform sampling, the supplier shall not challenge the accuracy of the sampling results based on alleged errors in sample collection.

(c) Each service line sample shall be 1 liter in volume and have stood motionless in the lead service line for not less than 6 hours. Lead service line samples shall be collected in 1 of the following 3 ways:

(i) At the tap after flushing the volume of water between the tap and the lead service line. The volume of water shall be calculated based on the interior diameter and length of the pipe between the tap and the lead service line.

(ii) Tapping directly into the lead service line.

(iii) If the sampling site is a building constructed as a single-family residence, allowing the water to run until there is a significant change in temperature which would be indicative of water that has been standing in the lead service line.

(d) A supplier shall collect each first-draw tap sample from the same sampling site from which it collected a previous sample. If, for any reason, the supplier cannot gain entry to a sampling site to collect a follow-up tap sample, the supplier may collect the follow-up tap sample from another sampling site in its sampling pool.

(e) The supplier of a nontransient noncommunity water system, or a community water system that meets the criteria of R 325.10410(8)(a) and (b), that does not have enough taps that can supply first-draw samples, as defined in R 325.10105(d), may apply to the department, in writing, to substitute non-first-draw samples. The supplier shall collect as many first-draw samples from appropriate taps as possible and identify sampling times and locations that would likely result in the longest standing time for the remaining sites. The department has the discretion to waive the requirement for prior department approval of non-first-draw sample sites selected by the supplier, either through department regulation or written notification to the supplier.

(3) Suppliers shall collect at least 1 sample during each monitoring period specified in subrule (4) of this rule from the number of sites listed in the standard monitoring column under this subrule. A supplier that conducts reduced monitoring under subrule (4)(d) of this rule shall collect at least 1 sample from the number of sites specified in the reduced monitoring column under this subrule during each monitoring period specified in subrule (4)(d) of this rule. The reduced monitoring sites shall be representative of the sites required for standard monitoring. The department may specify sampling locations when a system is conducting reduced monitoring.

System Size (Number of People Served)	Number of Sites (Standard Monitoring)	Number of Sites (Reduced Monitoring)
More than 100,000	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
Fewer than 101	5	5

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(4) Provisions for the timing of monitoring for lead and copper in tap water are as follows:

(a) The first 6-month monitoring period for small, medium-size, and large water systems shall begin on the following dates:

System Size (Number of People Served)	First 6-Month Monitoring Period Begins On
More than 50,000	January 1, 1992
3,301 to 50,000	July 1, 1992
Fewer than 3,301	July 1, 1993

All large water systems shall be monitored during 2 consecutive 6-month periods. All small and medium-size water systems shall be monitored during each 6-month monitoring period until either of the following occurs:

(i) The system exceeds the lead or copper action level and the supplier is therefore required to implement the corrosion control treatment under R 325.10604f(2), in which case the supplier shall continue monitoring under subdivision (b) of this subrule.

(ii) The system is in compliance with the lead and copper action levels during 2 consecutive 6-month monitoring periods, in which case the supplier may reduce monitoring under subdivision (d) of this subrule.

(b) Monitoring provisions after the installation of corrosion control and source water treatment are as follows:

(i) The supplier of a large water system that installs optimal corrosion control treatment under R 325.10604f(2)(d)(iii) shall monitor during 2 consecutive 6-month monitoring periods by the date specified in R 325.10604f(2)(d)(iv).

(ii) The supplier of a small or medium-size water system that installs optimal corrosion control treatment under R 325.10604f(2)(e)(v) shall monitor during 2 consecutive 6-month monitoring periods by the date specified in R 325.10604f(2)(e)(vi).

(iii) A supplier that installs source water treatment under R 325.10604f(4)(a)(ii) shall monitor during 2 consecutive 6-month monitoring periods by the date specified in R 325.10604f(4)(a)(iii).

(c) After the department specifies the values for water quality control parameters, the supplier shall monitor during each subsequent 6-month monitoring period, with the first monitoring period to begin on the date the department specifies the optimal values.

(d) Reduced monitoring provisions are as follows:

(i) The supplier of a small or medium-size water system that is in compliance with the lead and copper action levels during each of 2 consecutive 6-month monitoring periods may reduce the number of samples under subrule (3) of this rule and may reduce the frequency of sampling to once each year.

(ii) A supplier of a small, medium-size, or large water system that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the department during each of 2 consecutive 6-month monitoring periods may reduce the frequency of monitoring for lead and copper at the tap to once each year and reduce the number of lead and copper samples under subrule (3) of this rule if it receives written approval from the department.

(iii) The supplier of a small or medium-size water system that is in compliance with the lead and copper action levels during 3 consecutive years of monitoring may reduce the frequency of monitoring for lead and copper from annually to once every 3 years. A supplier of a small, medium-size, or large water system that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the department during 3 consecutive years of monitoring may reduce the frequency of monitoring for lead and copper at the tap from annually to once every 3 years if it receives written approval from the department.

(iv) A supplier who reduces the number and frequency of sampling shall collect these samples from representative sites included in the pool of targeted sampling sites identified in subrule (1) of this rule. A supplier who samples annually or less frequently shall conduct the lead and copper tap sampling during the month of June, July, August, or September unless the department has approved a different sampling period under subparagraph (A) of this paragraph, as follows:

(A) The department, at its discretion, may approve a different period for conducting the lead and copper tap sampling for suppliers collecting a reduced number of samples. The period shall be no longer than 4 consecutive months and shall represent a time of normal operation where the highest levels of lead are most likely to occur. For a nontransient noncommunity water system that does not operate during the months of June through September, and for which the period of normal operation where the highest levels of lead are most likely to occur is not known, the department shall designate a period that represents a time of normal operation for the system.

(B) Suppliers monitoring annually that have been collecting samples during the months of June through September and that received department approval to alter their sample collection period under subparagraph (A) of this paragraph, shall collect their next round of samples during a time period that ends no later than 21 months after the previous round of sampling.

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Suppliers monitoring triennially that have been collecting samples during the months of June through September, and receive department approval to alter the sampling collection period under subparagraph (A) of this paragraph, shall collect their next round of samples during a time period that ends no later than 45 months after the previous round of sampling. Subsequent rounds of sampling shall be collected annually or triennially, as required by this subrule. Suppliers of small water systems with waivers, granted under subrule (7) of this rule, that have been collecting samples during the months of June through September and that received department approval to alter their sample collection period under subparagraph (A) of this paragraph shall collect their next round of samples before the end of the 9-year cycle.

(v) A supplier that demonstrates for 2 consecutive 6-month monitoring periods that the tap water lead level computed under R 325.10604f(1)(c) is less than or equal to 0.005 mg/l and the tap water copper level computed under R 325.10604f(1)(c) is less than or equal to 0.65 mg/l may reduce the number of samples under subrule (3) of this rule and reduce the frequency of sampling to once every 3 calendar years.

(vi) The following provisions apply to supplies subject to reduced monitoring:

(A) The supplier of a small or medium-size water system subject to reduced monitoring that exceeds the lead or copper action level shall resume sampling under subdivision (c) of this subrule and shall collect the number of samples specified for the standard monitoring under subrule (3) of this rule. The supplier shall also conduct water quality parameter monitoring under R 325.10710b(4), (5), or (6), as appropriate, during the monitoring period in which the system exceeded the action level. The supplier may resume annual monitoring for lead and copper at the tap at the reduced number of sites specified in subrule (3) of this rule after it has completed 2 subsequent consecutive 6-month rounds of monitoring that meet the criteria of paragraph (i) of this subdivision or may resume triennial monitoring for lead and copper at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either paragraph (iii) or (v) of this subdivision.

(B) If a system subject to the reduced monitoring frequency fails to operate at or above the minimum value or within the range of values for the water quality parameters specified by the department for more than 9 days in a 6-month period specified in R 325.10710b(6), the supplier shall conduct tap water sampling for lead and copper at the frequency specified in subdivision (c) of this subrule, collect the number of samples specified for standard monitoring under subrule (3) of this rule, and shall resume monitoring for water quality parameters within the distribution system under R 325.10710b(6). The supplier may resume reduced monitoring for lead and copper at the tap and for water quality parameters within the distribution system under the following conditions:

(1) The supplier may resume annual monitoring for lead and copper at the tap at the reduced number of sites specified in subrule (3) of this rule after it has completed 2 subsequent 6-month rounds of monitoring that meet the criteria of paragraph (ii) of this subdivision and the supplier has received written approval from the department to resume reduced monitoring on an annual frequency.

(2) The supplier may resume triennial monitoring for lead and copper at the tap at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either paragraph (iii) or (v) of this subdivision and the supplier has received written approval from the department to resume triennial monitoring.

(3) The supplier may reduce the number of water quality parameter tap water samples required under R 325.10710b(7)(a) and the frequency with which it collects the samples under R 325.10710b(7)(b). The supplier may not resume triennial monitoring for water quality parameters at the tap until it demonstrates, under the requirements of R 325.10710b(7)(b), that it has requalified for triennial monitoring.

(vii) For a system subject to a reduced monitoring frequency under subdivision (d) of this subrule, if the supplier either adds a new source of water or changes the water treatment, it shall inform the department in writing under R 325.10710d(1)(a)(iii). The department may require the supplier to resume sampling under subdivision (c) of this subrule and collect the number of samples specified for standard monitoring under subrule (3) of this rule or take other appropriate steps such as increased water quality parameter monitoring or reevaluation of its corrosion control treatment given the potentially different water quality considerations.

(5) The results of monitoring conducted in addition to the minimum requirements of this rule shall be considered in calculating the ninetieth percentile lead or copper level.

(6) A sample invalidated under this subrule does not count toward determining lead or copper ninetieth percentile levels under R 325.604f(1)(c) or toward meeting the minimum monitoring requirements of subrule (3) of this rule. All of the following provisions apply to invalidating samples:

(a) The department may invalidate a lead or copper tap water sample if at least 1 of the following conditions is met:

(i) The laboratory establishes that improper sample analysis caused erroneous results.

(ii) The department determines that the sample was taken from a site that did not meet the site selection criteria of this rule.

(iii) The sample container was damaged in transit.

(iv) There is substantial reason to believe that the sample was subject to tampering.

(b) The supplier shall report the results of all samples to the department and all supporting documentation for samples the

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supplier believes should be invalidated.

(c) To invalidate a sample under subdivision (a) of this subrule, the decision and the rationale for the decision shall be documented in writing. The department may not invalidate a sample solely on the grounds that a follow-up sample result is higher or lower than that of the original sample.

(d) The supplier shall collect replacement samples for the samples invalidated under this rule if, after the invalidation of 1 or more samples, the supplier has too few samples to meet the minimum requirements of subrule (3) of this rule. The replacement samples shall be taken as soon as possible, but not later than 20 days after the date the department invalidates the sample or by the end of the applicable monitoring period, whichever occurs later. Replacement samples taken after the end of the applicable monitoring period shall not also be used to meet the monitoring requirements of a subsequent monitoring period. The replacement samples shall be taken at the same locations as the invalidated samples or, if that is not possible, at locations other than those already used for sampling during the monitoring period.

(7) The supplier of a small water system that meets the criteria of this subrule may apply to the department to reduce the frequency of monitoring for lead and copper under this rule to once every 9 years, that is, a "full waiver", if it meets all of the materials criteria specified in subdivision (a) of this subrule and all of the monitoring criteria specified in subdivision (b) of this subrule. If a small water system meets the criteria in subdivisions (a) and (b) of this subrule only for lead, or only for copper, the supplier may apply to the department for a waiver to reduce the frequency of tap water monitoring to once every 9 years for that contaminant only, that is, a "partial waiver".

(a) The supplier shall demonstrate that its distribution system and service lines and all drinking water system plumbing, including plumbing conveying drinking water within all residences and buildings connected to the system, are free of lead-containing materials or copper-containing materials, or both, as those terms are defined in this subdivision, as follows:

(i) To qualify for a full waiver, or a waiver of the tap water monitoring requirements for lead, that is, a "lead waiver", the supplier shall provide certification and supporting documentation to the department that the system is free of all lead-containing materials and that the system complies with both of the provisions in this paragraph. Lead-free is defined in the international plumbing code, 2000 edition, which is adopted by reference in R 407.30701.

(A) The system does not contain plastic pipes that contain lead plasticizers or plastic service lines that contain lead plasticizers.

(B) The system is free of lead service lines, lead pipes, lead soldered pipe joints, and leaded brass or bronze alloy fittings and fixtures, unless the fittings and fixtures meet the specifications of standards established pursuant to "Prohibition on Use of Lead Pipes, Solder, and Flux: Plumbing Fittings and Fixtures" 42 U.S.C. 300G-6(e), which are adopted by reference. The adopted material is available from the Superintendent of Documents at the address in R 325.10116(b) for a cost of \$56.00 at the time of adoption of these rules. The adopted material is available for inspection, or copies are available at no cost from the offices of the department at the address in R 325.10116(a).

(ii) To qualify for a full waiver, or a waiver of the tap water monitoring requirements for copper, that is, a "copper waiver", the supplier shall provide certification and supporting documentation to the department that the system does not contain copper pipes or copper service lines.

(b) The supplier shall have completed at least 1 6-month round of standard tap water monitoring for lead and copper at sites approved by the department and from the number of sites required by subrule (3) of this rule and demonstrate that the ninetieth percentile levels for all rounds of monitoring conducted since the system became free of all lead-containing or copper-containing materials, or both, as appropriate, meet the following criteria:

(i) To qualify for a full waiver or a lead waiver, the supplier shall demonstrate that the ninetieth percentile lead level does not exceed 0.005 mg/l.

(ii) To qualify for a full waiver or a copper waiver, the supplier shall demonstrate that the ninetieth percentile copper level does not exceed 0.65 mg/l.

(c) The department shall notify the system of its waiver determination, in writing setting forth the basis of its decision and any condition of the waiver. As a condition of the waiver, the department may require the supplier to perform specific activities, for example, limited monitoring, periodic outreach to customers to remind them to avoid installation of materials that might void the waiver, to avoid the risk of lead or copper concentration of concern in tap water. The supplier shall continue monitoring for lead and copper at the tap as required by subdivisions (a) through (d) of this subrule, as appropriate, until it receives written notification from the department that the waiver has been approved.

(d) Monitoring frequencies for supplies with waivers are as follows:

(i) For a system with a full waiver, the supplier shall conduct tap water monitoring for lead and copper under subrule (4)(d)(iv) of this rule at the reduced number of sampling sites identified in subrule (3) of this rule at least once every 9 years and provide the materials certification specified in subdivision (a) of this subrule for both lead and copper to the department along with the monitoring results.

(ii) For a system with a partial waiver, the supplier shall conduct tap water monitoring for the waived contaminant under subrule (4)(d)(iv) of this rule at the reduced number of sampling sites specified in subrule (3) of this rule at least once every

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9 years and provide the materials certification specified in subdivision (a) of this subrule pertaining to the waived contaminant along with the monitoring results. The supplier also shall continue to monitor for the non-waived contaminant under requirements of subrule (4)(a) through (d) of this rule, as appropriate.

(iii) For a system with a full or partial waiver, if the supplier adds a new source of water or changes the water treatment, it shall notify the department, in writing, under R 325.10710d(a)(iii). The department has the authority to require the supplier to add or modify waiver conditions, for example, require recertification that the system is free of lead-containing or copper-containing materials, or both, require additional round or rounds of monitoring, if it considers the modifications are necessary to address treatment or source water changes at the system.

(iv) For a system with a full or partial waiver, if the supplier becomes aware that the system is no longer free of lead-containing or copper-containing materials, as appropriate, for example, as a result of new construction or repairs, the supplier shall notify the department, in writing, not later than 60 days after becoming aware of the change.

(e) If the supplier continues to satisfy the requirements of subdivision (d) of this subrule, the waiver will be renewed automatically, unless a condition listed in paragraphs (i) through (iii) of this subdivision occurs. For a system whose waiver has been revoked, the supplier may reapply for a waiver if it again meets the appropriate materials and monitoring criteria of subdivisions (a) and (b) of this subrule. The waiver is revoked if any of the following conditions exist:

(i) A system with a full waiver or a lead waiver no longer satisfies the materials criteria of subdivision (a)(i) of this subrule or has a ninetieth percentile lead level of more than 0.005 mg/l.

(ii) A system with a full waiver or a copper waiver no longer satisfies the materials criteria of subdivision (a)(ii) of this subrule or has a ninetieth percentile copper level of more than 0.65 mg/l.

(iii) The department notifies the supplier, in writing setting forth the basis of its decision, that the waiver has been revoked.

(f) A system whose full or partial waiver has been revoked by the department is subject to the corrosion control treatment and lead and copper tap water monitoring requirements, as follows:

(i) If the system exceeds the lead or copper action level, or both, the supplier shall implement corrosion control treatment under the deadlines specified in R 325.10604f(2)(e) and other applicable requirements of this part.

(ii) If the system meets both the lead and the copper action level, the supplier shall monitor for lead and copper at the tap not less frequently than once every 3 years using the reduced number of sample sites specified in subrule (3) of this rule.

(g) Small water system waivers approved by the department, in writing, before April 11, 2000, shall remain in effect if the supplier has demonstrated that the system is both free of lead-containing and copper-containing materials, as required by subdivision (a) of this subrule, and that the system's ninetieth percentile lead levels and ninetieth percentile copper levels meet the criteria of subdivision (b) of this subrule, and that the supplier continues to meet the waiver eligibility criteria of subdivision (e) of this subrule. The first round of tap water monitoring conducted pursuant to subdivision (d) of this subrule shall be completed not later than 9 years after the last time the supplier has monitored for lead and copper at the tap.

History: 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10710b Monitoring requirements for supplies exceeding lead and copper action levels.

Rule 710b. (1) The requirements of this rule are summarized in table 1 of this rule. Suppliers of the following systems shall monitor for water quality parameters in addition to lead and copper under this rule:

(a) Large water systems.

(b) Small and medium-size water systems that exceed the lead or copper action level.

(2) Sample collection methods provisions are as follows:

(a) Tap samples shall be representative of water quality throughout the distribution system taking all of the following factors into account:

(i) The number of persons served.

(ii) The different sources of water.

(iii) The different treatment methods employed by the supplier.

(iv) Seasonal variability.

Tap sampling under this subdivision is not required to be conducted at taps targeted for lead and copper sampling under R 325.10710a(1).

(b) Samples collected at the entry point or points to the distribution system shall be from locations that are representative of each source after treatment. If a system draws water from more than 1 source and the sources are combined before distribution, the supplier shall sample at an entry point to the distribution system during periods of normal operating conditions, for example, when water is representative of all sources being used.

(3) The number of samples a supplier is required to collect are as follows:

(a) A supplier shall collect 2 tap samples for applicable water quality parameters during each monitoring period specified in subrules (4) to (7) of this rule from the following number of sites:

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<u>System Size</u> <u>(Number of People Served)</u>	<u>Number of Sites for</u> <u>Water Quality Parameters</u>
More than 100,000	25
10,001 to 100,000	10
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
Fewer than 101	1

(b) Except as provided in subrule (5)(c) of this rule, a supplier shall collect 2 samples for each applicable water quality parameter at each entry point to the distribution system during each monitoring period specified in subrule (4) of this rule. During each monitoring period specified in subrules (5) to (7) of this rule, a supplier shall collect 1 sample for each applicable water quality parameter at each entry point to the distribution system.

(4) The supplier of a large water system shall measure the applicable water quality parameters, at the locations specified in the following subdivisions at taps and at each entry point to the distribution system during each 6-month monitoring period specified in R 325.10710a(4)(a). The supplier of a small or medium-size water system shall measure the applicable water quality parameters at the locations specified in the following subdivisions during each 6-month monitoring period, as specified in R 325.10710a(4)(a), that the system exceeds the lead or copper action level:

(a) At taps, a sample for each of the following:

(i) pH.

(ii) Alkalinity.

(iii) Orthophosphate, when an inhibitor containing a phosphate compound is used.

(iv) Silica, when an inhibitor containing a silicate compound is used.

(v) Calcium.

(vi) Conductivity.

(vii) Water temperature.

(b) At each entry point to the distribution system, a sample for each of the applicable parameters that are listed in subdivision (a) of this subrule.

(5) The supplier of a large water system that installs optimal corrosion control treatment under R 325.10604f(2)(d)(iii) shall measure the water quality parameters at the locations and frequencies specified in this subrule during each 6-month monitoring period specified in R 325.10710a(4)(b)(i). The supplier of a small or medium-size water system who installs optimal corrosion control treatment shall measure the water quality parameters at the locations specified in the following subdivisions during each 6-month monitoring period, as specified in R 325.10710a(4)(b)(ii), that the system exceeds the lead or copper action level:

(a) At taps, 2 samples for each of the following:

(i) pH.

(ii) Alkalinity.

(iii) Orthophosphate, when an inhibitor containing a phosphate compound is used.

(iv) Silica, when an inhibitor containing a silicate compound is used.

(v) Calcium, when calcium carbonate stabilization is used as part of the corrosion control.

(b) Except as provided in subdivision (c) of this subrule, at each entry point to the distribution system, at least 1 sample no less frequently than every 2 weeks for each of the following:

(i) pH.

(ii) When alkalinity is adjusted as part of optimal corrosion control, a reading of the dosage rate of the chemical used to adjust alkalinity and a reading of the alkalinity concentration.

(iii) When a corrosion inhibitor is used as part of optimal corrosion control, a reading of the dosage rate of the inhibitor used and a reading of the concentration of orthophosphate or silica, whichever is applicable.

(c) A supplier of a ground water system may limit entry point sampling described in subdivision (b) of this subrule to those entry points that are representative of water quality and treatment conditions throughout the system. If water from untreated ground water sources mixes with water from treated ground water sources, the supplier shall monitor for water quality parameters both at representative entry points receiving treatment and representative entry points receiving no treatment. Before the start of the monitoring under this subdivision, the supplier shall provide to the department written information identifying the selected entry points and documentation, including information on seasonal variability, sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

(6) After the department specifies the values for applicable water quality control parameters reflecting optimal corrosion

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control treatment, the supplier of a large water system shall measure the applicable water quality parameters under subrule (5) of this rule and determine compliance with the requirement of R 325.10604f(3)(f) every 6 months with the first 6-month period to begin on the date the department specifies the optimal values. The supplier of a small or medium-size water system shall measure the applicable water quality parameters under subrule (5) of this rule during each 6-month period, as specified in this subrule that the system exceeds the lead or copper action level. For the small or medium-size water system subject to a reduced monitoring frequency pursuant to R 325.10710a(4)(d) when the action level is exceeded, the end of the applicable 6-month period under this subrule shall coincide with the end of the applicable monitoring period under R 325.10710a(4)(d). Compliance with department-designated optimal water quality parameter values shall be determined as specified under R 325.10604f(3)(f).

(7) Reduced monitoring provisions are as follows:

(a) A supplier that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment during each of 2 consecutive 6-month monitoring periods under subrule (6) of this rule shall continue monitoring applicable water quality parameters at the locations and frequencies specified in subrule (5) of this rule. The supplier may reduce the number of sites from which it monitors during each 6-month monitoring period to the following:

System Size (Number of People Served)	Reduced Number of Sites For Water Quality Parameters
More than 100,000	10
10,001 to 100,000	7
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
Fewer than 101	1

(b) Reduced monitoring frequency provisions are as follows:

(i) A supplier that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the department during 3 consecutive years of monitoring specified in this subdivision may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in subdivision (a) of this subrule from every 6 months to annually. A supplier that maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the department during 3 consecutive years of annual monitoring specified in this subdivision may reduce the frequency with which it collects the number of tap samples for applicable water quality parameters specified in subdivision (a) of this subrule from annually to every 3 years.

(ii) A supplier may reduce the frequency with which it collects tap samples for applicable water quality parameters specified in subdivision (a) of this subrule to every 3 years if it demonstrates during 2 consecutive monitoring periods that its tap water lead level at the ninetieth percentile is less than or equal to the PQL for lead specified in 40 C.F.R. §141.89(a)(1)(ii), as adopted by reference in R 325.10605, that its tap water copper level at the ninetieth percentile is less than or equal to 0.65 mg/l for copper in R 325.10604f(3)(f), and that it also has maintained the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the department.

(c) A supplier that conducts sampling annually shall collect the samples evenly throughout the year to reflect seasonal variability.

(d) The supplier of a system subject to the reduced monitoring frequency who fails to operate at or above the minimum value or within the range of values for the water quality parameters specified by the department for more than 9 days in a 6-month period specified in R 325.10604f(3)(f) shall resume distribution system tap water sampling under the number and frequency requirements specified in subrule (6) of this rule. The supplier may resume annual monitoring for water quality parameters at the tap at the reduced number of sites specified in subdivision (a) of this subrule after it has completed 2 subsequent consecutive 6-month rounds of monitoring that meet the criteria of that subdivision or may resume triennial monitoring for water quality parameters at the tap at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either subdivision (b)(i) or (ii) of this subrule.

(8) Additional monitoring provisions are as follows:

(a) The results of monitoring conducted in addition to the minimum requirements of this rule shall be considered in determining the concentrations of water quality parameters.

(b) A supplier that fails to meet the lead action level based on tap samples collected under R 325.10710a shall offer to arrange for sampling the tap water of a customer who requests sampling. The supplier is not required to pay for collecting or analyzing the sample and is not required to collect and analyze the sample.

(9) Table 1 of this rule reads as follows:

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Table 1 Summary of Monitoring Requirements for Water Quality Parameters – Lead, Copper, Corrosion Control¹

Monitoring Period	Parameters ²	Location	Frequency
Initial monitoring	pH, alkalinity, orthophosphate or silica ³ , calcium, conductivity, temperature	Taps and at entry point or points to distribution system	6 months
After installation of corrosion control	pH, alkalinity, orthophosphate or silica ³ , calcium ⁴	Taps	Every 6 months
	pH, alkalinity dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual ⁵	Entry point or points to distribution system ⁶	No less frequently than every 2 weeks
After department specifies parameter values for optimal corrosion control	pH, alkalinity, orthophosphate or silica ³ , calcium ⁴	Taps	Every 6 months
	pH, alkalinity dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual ⁵	Entry point or points to Distribution system ⁶	No less frequently than every 2 weeks
Reduced monitoring	pH, alkalinity, orthophosphate or silica ³ , calcium ⁴	Taps	Every 6 months annually ⁷ or every 3 years ⁸ at a reduced number of sites
	pH, alkalinity dosage rate and concentration (if alkalinity adjusted control), inhibitor dosage rate and inhibitor residual ⁵	Entry point or points to distribution system ⁶	No less frequently than every 2 weeks

¹ Table is for illustrative purposes; consult the text of this part for precise regulatory requirements.

² Suppliers of small and medium-size water systems shall monitor for water quality parameters during monitoring periods in which the system exceeds the lead or copper action level.

³ Orthophosphate shall be measured when an inhibitor containing a phosphate compound is used. Silica shall be measured when an inhibitor containing silicate compound is used.

⁴ Calcium shall be measured when calcium carbonate stabilization is used as part of corrosion control.

⁵ Inhibitor dosage rates and inhibitor residual concentrations (orthophosphate or silica) shall be measured when an inhibitor is used.

⁶ Ground water suppliers may limit monitoring to representative locations throughout the system.

⁷ Suppliers may reduce frequency of monitoring for water quality parameters at the tap from every 6 months to annually if they have maintained the range of values for water quality parameters reflecting optimal corrosion control during 3 consecutive years of monitoring.

⁸ Suppliers may further reduce the frequency of monitoring for water quality parameters at the tap from annually to once every 3 years if they have maintained the range of values for water quality parameters reflecting optimal corrosion control

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during 3 consecutive years of annual monitoring. Suppliers may accelerate to triennial monitoring for water quality parameters at the tap if they have maintained ninetieth percentile lead levels less than or equal to 0.005 mg/l, ninetieth percentile copper levels less than or equal to 0.65 mg/l, and the range of water quality parameters designated by the department as representing optimal corrosion control during 2 consecutive 6-month monitoring periods.

History: 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 1998 MR 2, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10710c Monitoring requirements for lead and copper in source water.

Rule 710c. (1) Sample location, collection methods, and number of samples required for lead and copper monitoring in source water are as follows:

(a) The supplier of a system that fails to meet the lead or copper action level based on tap samples collected under R 325.10710a shall collect lead and copper source water samples under the following requirements regarding sample location, number of samples, and collection methods:

(i) Suppliers of ground water systems shall take a minimum of 1 sample at every entry point to the distribution system which is representative of each well after treatment, hereafter called a sampling point. The supplier shall take 1 sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.

(ii) Suppliers of surface water systems shall take a minimum of 1 sample at every entry point to the distribution system after the application of treatment or in the distribution system at a point which is representative of each source after treatment, hereafter called a sampling point. The supplier shall take each sample at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. For purposes of this paragraph, surface water systems include systems with a combination of surface and ground sources.

(iii) If a system draws water from more than 1 source and the sources are combined before distribution, the supplier shall sample at an entry point to the distribution system during periods of normal operating conditions, that is, when water is representative of all sources being used.

(b) If the results of sampling, taken to determine compliance with R 325.10604f(4)(b)(iv), indicate an exceedance of the maximum permissible source water levels established by the department, then the department may require that 1 additional sample be collected as soon as possible after the initial sample was taken, but not more than 2 weeks later, at the same sampling point. If a department-required confirmation sample is taken for lead or copper, then the results of the initial and confirmation samples shall be averaged to determine compliance with the department-specified maximum permissible levels. A sample value below the detection limit shall be considered to be zero. A value above the detection limit, but below the PQL, shall either be considered as the measured value or be considered 1/2 of the PQL.

(2) The supplier of a system that exceeds the lead or copper action level at the tap shall collect 1 source water sample from each entry point to the distribution system within 6 months after the action level is exceeded.

(3) A supplier that installs source water treatment under R 325.10604f(4)(a)(ii) shall collect an additional source water sample from each entry point to the distribution system during 2 consecutive 6-month monitoring periods by the deadline specified in R 325.10604f(4)(a)(iii).

(4) The following provisions apply to the monitoring frequency after the department specifies maximum permissible source water levels or determines that source water treatment is not needed:

(a) A supplier shall monitor to determine compliance with R 325.10604f(4)(b)(iv) at the frequency specified in the following paragraphs where the department specifies maximum permissible source water levels or determines that the supplier is not required to install source water treatment:

(i) A supplier of only groundwater shall collect samples once during the 3-year compliance period, as defined in R 325.10103, that is in effect when the applicable department determination under this subdivision is made. The supplier shall collect samples once during each subsequent compliance period.

(ii) A supplier of surface water or a combination of surface water and groundwater shall collect samples once during each year. The first annual monitoring period shall begin on the date on which the applicable department determination is made under this subdivision.

(b) A supplier is not required to conduct source water sampling for lead or copper if the system is in compliance with the action level for the specific contaminant in tap water samples during the entire source water sampling period applicable to the system under subdivision (a)(i) and (ii) of this subrule.

(5) Reduced monitoring frequency provisions are as follows:

(a) A supplier of only groundwater may reduce the monitoring frequency for lead and copper in source water to once during each 9-year compliance cycle, as defined in R 325.10103 if the system meets 1 of the following criteria:

(i) The supplier demonstrates that finished drinking water entering the distribution system has been maintained below the department specified maximum permissible lead and copper concentrations as required in R 325.10604f(4)(b)(iv) during not less than 3 consecutive compliance periods under subrule (4)(a) of this rule.

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(ii) The department has determined that source water treatment is not needed and the supplier demonstrates that, during not less than 3 consecutive compliance periods in which sampling was conducted under subrule (4)(a) of this rule, the concentration of lead in source water was less than or equal to 0.005 mg/l and the concentration of copper in source water was less than or equal to 0.65 mg/l.

(b) The supplier of surface water or a combination of surface water and groundwater may reduce the monitoring frequency in subrule (4)(a) of this rule to once during each 9-year compliance cycle, as defined in R 325.10103 if the system meets either of the following criteria:

(i) The supplier demonstrates that finished drinking water entering the distribution system has been maintained below the department specified maximum permissible lead and copper concentrations as required in R 325.10604f(4)(b)(iv) for not less than 3 consecutive years.

(ii) The department has determined that source water treatment is not needed and the supplier demonstrates that, during not less than 3 consecutive years, the concentration of lead in source water was less than or equal to 0.005 mg/l and the concentration of copper in source water was less than or equal to 0.65 mg/l.

(c) A system that uses a new source of water is not eligible for reduced monitoring for lead or copper until concentrations in samples collected from the new source during 3 consecutive monitoring periods are below the department-specified maximum permissible lead and copper concentrations as required in R 325.10604f(4)(a)(iv).

History: 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10710d Reporting requirements for lead, copper, and corrosion control.

Rule 710d. A supplier shall report all of the following information to the department under this rule:

(a) Reporting provisions for tap water monitoring for lead and copper and for water quality parameter monitoring are as follows:

(i) Except as provided in subparagraph (G) of this paragraph, a supplier shall report the information specified in this paragraph for all tap water samples specified in R 325.10710a and for all water quality parameter samples specified in R 325.10710b within the first 10 days after the end of each applicable monitoring period specified in R 325.10710a and R 325.10710b, for example, every 6-months, annually, every 3 years, or every 9 years:

(A) The results of all tap samples for lead and copper, including the location of each site and the criteria in R 325.10710a(1)(c), (d), (e), (f), or (g) used to select the site for the system's sampling pool.

(B) Documentation for each tap water lead or copper sample for which the supplier requests invalidation pursuant to R 325.10710a(6)(b).

(C) The ninetieth percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period, calculated in compliance with the provisions of R 325.10604f(1)(c)(i), unless the department calculates the system's ninetieth percentile lead and copper levels under subdivision (h) of this subrule.

(D) With the exception of initial tap sampling conducted under R 325.10710a(4)(a), a supplier shall designate sites not sampled during previous monitoring periods and include an explanation of why sampling sites have changed.

(E) The results of all tap samples for pH and, where applicable, alkalinity, calcium, conductivity, temperature, and orthophosphate or silica collected under R 325.10710b(b) to (e).

(F) The results of all samples collected at the entry point or points to the distribution system for applicable water quality parameters under R 325.10710b(b) to (e).

(G) A supplier shall report the results of all water quality parameter samples collected under R 325.10710b(5) through (8) during each 6-month monitoring period specified in R 325.10710b(6) within the first 10 days following the end of the monitoring period, unless the department has specified a more frequent reporting requirement.

(ii) For a nontransient noncommunity water system, or a community water system meeting the criteria of R 325.10410(8)(a) and (b), that does not have enough taps that can provide first-draw samples, the supplier shall do either of the following as appropriate:

(A) Provide written documentation to the department identifying standing times and locations for enough non-first-draw samples to make up its sampling pool under R 325.10710a(2)(e) by the start of the first applicable monitoring period under R 325.10710a(4) that commences after April 11, 2000, unless the department has waived prior department approval of non-first-draw sample sites selected by the supplier pursuant to R 325.10710a(2)(e).

(B) If the department has waived prior approval of non-first-draw sample sites selected by the supplier, identify, in writing, each site that did not meet the 6-hour minimum standing time and the length of standing time for that particular substitute sample collected pursuant to R 325.10710a(2)(e) and include this information with the lead and copper tap sample results submitted pursuant to subdivision (a)(i) of this subrule.

(iii) Not later than 60 days after the addition of a new source or a change in water treatment, unless the department requires earlier notification, a supplier considered to have optimized corrosion control under R 325.10604f(2)(b), a system subject to reduced monitoring pursuant to R 325.10710a(4)(d), or a system subject to a monitoring waiver pursuant to R 325.10710a(7)

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shall send written documentation to the department describing the change. If prior department approval of the treatment change or new source is not required, suppliers are encouraged to provide the notification to the department beforehand to minimize the risk the treatment change or new source will adversely affect optimal corrosion control.

(iv) The supplier of a small water system applying for a monitoring waiver under R 325.10710a(7), or subject to a waiver granted pursuant to R 325.10710a(7)(c), shall provide all of the following information to the department, in writing, by the specified deadline:

(A) By the start of the first applicable monitoring period in R 325.10710a(4), the supplier of a small water system applying for a monitoring waiver shall provide the documentation required to demonstrate that it meets the waiver criteria of R 325.10710a(7)(a) and (b).

(B) Not later than 9 years after the monitoring previously conducted pursuant to R 325.10710a(7)(b) or R 325.10710a(7)(d)(i), the supplier of a small water system desiring to maintain its monitoring waiver shall provide the information required by R 325.10710a(7)(d)(i) and (ii).

(C) Not later than 60 days after the supplier becomes aware that the system is no longer free of lead-containing or copper-containing material, or both, as appropriate, the supplier of a small water system with a monitoring waiver shall provide written notification to the department, setting forth the circumstances resulting in the lead-containing or copper-containing materials, or both, being introduced into the system and what corrective action, if any, the supplier plans to remove these materials.

(v) For each ground water system that limits water quality parameter monitoring to a subset of entry points under R 325.10710b(5)(c), the supplier shall provide, by the commencement of the monitoring, written correspondence to the department that identifies the selected entry points and includes information sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

(b) Source water monitoring provisions are as follows:

(i) A supplier shall report the sampling results for all source water samples collected under R 325.10710c within the first 10 days after the end of each source water monitoring period, for example, annually, per compliance period, or per compliance cycle, specified in R 325.10710c.

(ii) With the exception of the first round of source water sampling conducted under R 325.10710c(2), a supplier shall specify sites that were not sampled during previous monitoring periods and include an explanation of why the sampling points have changed.

(c) A supplier shall report the following corrosion control treatment information to the department by the applicable dates specified in R 325.10604f(2):

(i) For a supplier that has already optimized corrosion control, the information required in R 325.10604f(2)(b)(ii) or (iii).

(ii) For a supplier required to optimize corrosion control, the supplier's recommendation regarding optimal corrosion control treatment under R 325.10604f(3)(a).

(iii) For a supplier that is required to evaluate the effectiveness of corrosion control treatments under R 325.10604f(3)(c), the information required by R 325.10604f(3)(c).

(iv) For a supplier required to install optimal corrosion control designated by the department under R 325.10604f(3)(d), documentation certifying that the supplier has completed installing the optimal corrosion control.

(d) A supplier shall provide the following source water treatment information to the department by the applicable dates specified in R 325.10604f(4):

(i) If required under R 325.10604f(4)(b)(i), the supplier's recommendation regarding source water treatment.

(ii) For a supplier required to install source water treatment under R 325.10604f(4)(b)(ii), documentation certifying that the supplier has completed installing the treatment designated by the department within 24 months after the department designated the treatment.

(e) A supplier shall report all of the following lead service line replacement information to the department to demonstrate compliance with the requirements of R 325.10604f(5):

(i) Within 12 months after a system exceeds the lead action level in sampling referred to in R 325.10604f(5)(a), the supplier shall submit a written report to the department that demonstrates the supplier has conducted a materials evaluation, including the evaluation specified in R 325.10710a(1), to identify the initial number of lead service lines in its distribution system and shall provide the department with the supplier's schedule for replacing annually not less than 7% of the initial number of lead service lines in its distribution system.

(ii) Within 12 months after a system exceeds the lead action level in sampling referred to in R 325.10604f(5)(a), and every 12 months thereafter, the supplier shall submit a written report to the department that demonstrates the supplier has complied with either of the following requirements:

(A) Replaced, in the previous 12 months, not less than 7% of the initial lead service lines, or a greater number of lines specified by the department under R 325.10604f(4), in its distribution system.

(B) Conducted sampling demonstrating that the lead concentration in all service line samples from an individual line or lines,

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taken under R 325.10710a(2)(c), is less than or equal to 0.015 mg/l. In those cases, the total number of lines that were replaced or that meet the criteria specified in R 325.10604f(5)(c), or both, shall equal not less than 7% of the initial number of lead lines identified under subdivision (a) of this rule or the percentage specified by the department under R 325.10604f(4).

(iii) The annual documentation submitted to the department under paragraph (ii) of this subdivision, which shall contain all of the following information:

(A) The number of lead service lines scheduled to be replaced during the previous year of the system's replacement schedule.

(B) The number and location of each lead service line replaced during the previous year of the system's replacement schedule.

(C) If measured, the water lead concentration and location of each lead service line sampled, the sampling method, and the date of sampling.

(iv) At the request of the department, a supplier that collects lead service line samples following partial lead service line replacement required by R 325.10604f(5) shall report the results to the department as specified in R 325.10734(1). Suppliers shall also report additional information as specified by the department under R 325.11505(2) to verify that all partial lead service line replacement activities have taken place.

(f) A supplier shall provide the following public education reporting information to the department:

(i) If a system is subject to the public education requirements in R 325.10410, the supplier shall, within 10 days after the end of each period in which the supplier is required to perform public education tasks under R 325.10410(2), send written documentation to the department that contains both of the following:

(A) A demonstration that the supplier has delivered the public education materials that meet the content requirements in R 325.10410(1) and the delivery requirements in R 325.10410(2) and (3).

(B) A list of all the newspapers, radio stations, television stations, and facilities and organizations to which the supplier delivered public education materials during the period in which the supplier was required to perform public education tasks.

(ii) Unless required by the department, a supplier that previously has submitted the information required by paragraph (i)(B) of this subdivision need not resubmit the information required by paragraph (i)(B) of this subdivision, if there have been no changes in the distribution list and the supplier certifies that the public education materials were distributed to the same list submitted previously.

(g) A supplier that collects sampling data in addition to that required by this part shall report the results to the department within the first 10 days following the end of the applicable monitoring period specified in R 325.10710a, R 325.10710b, and R 325.10710c during which the samples are collected.

(h) A supplier is not required to report the ninetieth percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period, as required by subrule (1)(a)(i)(D) of this rule if both of the following provisions are satisfied:

(i) The department has previously notified the supplier that it will calculate the system's ninetieth percentile lead and copper concentrations, based on the lead and copper tap results submitted pursuant to paragraph (ii)(A) of this subdivision, and has specified a date before the end of the applicable monitoring period by which the supplier shall provide the results of lead and copper tap water samples.

(ii) The supplier has provided the following information to the department by the date specified in paragraph (i) of this subdivision:

(A) The results of all tap samples for lead and copper including the location of each site and the criteria under R 325.10710a(1)(c), (d), (e), (f), or (g), under which the site was selected for the system's sampling pool, pursuant to subdivision (a)(i) of this subrule.

(B) An identification of sampling sites utilized during the current monitoring period that were not sampled during previous monitoring periods, and an explanation why sampling sites have changed.

(iii) The department has provided the results of the ninetieth percentile lead and copper calculations, in writing, to the supplier before the end of the monitoring period.

History: 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10711

Source: 1997 AACS.

R 325.10712

Source: 1997 AACS.

R 325.10713

Source: 1997 AACS.

R 325.10714

Source: 1997 AACS.

R 325.10715

Source: 1997 AACS.

R 325.10716 Collection and analysis of samples for VOCs.

Rule 716. (1) Beginning with the initial compliance period, suppliers of water of community and nontransient, noncommunity public water supplies shall collect samples and cause analyses to be made according to the provisions of this rule for volatile organic chemicals to determine compliance with the state drinking water standards listed in R 325.10604b. Each supplier shall monitor at the time designated by the department within each compliance period. The department may increase required monitoring where necessary to detect variations within a water system.

(2) For transient, noncommunity and type III public water supplies, the department may require samples to be collected and analyzed at prescribed frequencies for organic chemicals.

(3) Suppliers of groundwater systems shall take a minimum of 1 sample at every entry point to the distribution system that is representative of each well after treatment. Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system.

(4) Suppliers of surface water systems or combined surface water and groundwater systems shall take a minimum of 1 sample at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment. Each sample shall be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system.

(5) If the system draws water from more than 1 source and the sources are combined before distribution, the system shall be sampled at an entry point to the distribution system during periods of normal operating conditions when water that is representative of all sources is being used.

(6) Suppliers of each community water system and nontransient, noncommunity water system shall take 4 consecutive quarterly samples for each contaminant, except for vinyl chloride, that is listed in R 325.10604b during each compliance period, beginning in the initial compliance period. Suppliers that use grandfathered samples and that did not detect any VOCs listed in R 325.10604b, table 6.2, shall, beginning with the initial compliance period, monitor annually under subrule (7) of this rule.

(7) If the initial monitoring has been completed by December 31, 1992, and the supplier did not detect any contaminant listed in R 325.10604b, then each groundwater and surface water supplier shall take 1 sample annually beginning with the initial compliance period.

(8) After a supplier has performed annual sampling for not less than 3 years, the department may allow a groundwater supplier that has not previously detected any contaminant that is listed in R 325.10604b to take 1 sample during each compliance period.

(9) Suppliers of each community water system and nontransient noncommunity groundwater system that do not detect, at or above 0.0005 milligrams per liter, a contaminant listed in R 325.10604b may apply to the department for a waiver from portions of the requirements of subrules (6) and (7) of this rule after completing the initial monitoring. A waiver shall be effective for not more than 6 years. The department may also issue waivers to small systems for the initial round of 1,2,4 trichlorobenzene monitoring.

(10) The following factors will be evaluated to determine if a waiver will be granted:

(a) Knowledge of previous use, including transport, storage, or disposal, of the contaminant within the watershed or zone of influence of the system. A supplier is not eligible for waiver if it is determined that previous use of the contaminant within the watershed or zone of influence has occurred.

(b) If previous use of the contaminant is unknown or the contaminant has been used previously, then all of the following factors shall be used to determine whether a waiver is granted:

(i) Previous analytical results.

(ii) The proximity of the system to a potential point or non-point source of contamination. Point sources include spills and leaks of chemicals at or near a water treatment facility or at manufacturing, distribution, or storage facilities or from hazardous and municipal waste landfills and other waste-handling or treatment facilities.

(iii) The environmental persistence and transport of the contaminants.

(iv) The number of persons who are served by the public water system and the proximity of a smaller system to a larger system.

(v) How well the water source is protected against contamination, such as whether it is a surface water or groundwater system. Groundwater supplies shall consider factors such as depth of the well, the type of soil, and wellhead protection. Surface water supplies shall consider watershed protection.

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(11) As a condition of a waiver, a groundwater supplier shall take 1 sample at each sampling point during the time the waiver is effective and update its vulnerability assessment considering the factors listed in subrule (10) of this rule. If the department does not reconfirm that the system is nonvulnerable based on this vulnerability assessment within 3 years of the initial determination, then the waiver is invalidated and the supplier is required to sample annually as specified in subrule (7) of this rule.

(12) Suppliers of each community water system and nontransient noncommunity surface water system that do not detect a contaminant listed in R 325.10604b may apply to the department for a waiver from the requirements of subrule (7) of this rule after completing the initial monitoring. Suppliers of Systems that do not detect a contaminant listed in R 325.10604b shall be determined by the department to be nonvulnerable based on a vulnerability assessment, considering the factors listed in subrule (10) of this rule, during each compliance period. Each supplier that receives a waiver shall sample at the frequency specified by the department.

(13) If a contaminant, other than vinyl chloride, listed in R 325.10604b is detected at a level more than 0.0005 milligrams per liter in any sample, then all of the following provisions apply:

(a) The supplier shall monitor quarterly at each sampling point that resulted in a detection.

(b) The department may decrease the quarterly monitoring requirement specified in subdivision (a) of this subrule if it has determined that the system is reliably and consistently below the MCL. A groundwater supplier shall take not less than 2 quarterly samples and a surface water supplier shall take not less than 4 quarterly samples for this determination.

(c) If the department determines that the system is reliably and consistently below the MCL, the department may allow the supplier to monitor annually. Suppliers that monitor annually shall monitor during the quarter or quarters that previously yielded the highest analytical result.

(d) Suppliers that conduct 3 consecutive annual samples and do not detect a contaminant may apply to the department for a waiver as specified in subrule (9) of this rule.

(e) Groundwater suppliers that detect 1 or more of the following 2-carbon organic compounds shall monitor quarterly for vinyl chloride:

(i) Trichloroethylene.

(ii) Tetrachloroethylene.

(iii) 1,2-dichloroethane.

(iv) 1,1,1-trichloroethane.

(v) cis-1,2-dichloroethylene.

(vi) trans-1,2-dichloroethylene.

(vii) 1,1-dichloroethylene. A vinyl chloride sample shall be taken at each sampling point at which 1 or more of the 2-carbon organic compounds were detected. If the results of the first analysis do not detect vinyl chloride, the department may reduce the quarterly monitoring frequency of vinyl chloride monitoring to 1 sample during each compliance period. Surface water suppliers shall monitor for vinyl chloride as specified by the department.

(14) Suppliers that violate the requirements of R 325.10604b shall monitor quarterly. After not less than 4 consecutive quarterly samples that show the system is in compliance with R 325.10604b and the department determines the system is reliably and consistently below the MCL, the supplier may monitor at the frequency and time specified in subrule (13)(c) of this rule.

(15) The department may require a confirmation sample for positive or negative results. If a confirmation sample is required by the department, the result shall be averaged with the first sampling result and the average shall be used for the compliance determination as specified by R 325.10604b. The department may delete results of obvious sampling errors from the calculation.

(16) The department may reduce the total number of samples a supplier shall analyze by allowing the use of compositing when the population served by the system is more than 3,300 persons. Composite samples from not more than 5 sampling points within a single water system are allowed if the detection limit of the method used for analysis is less than 1/5 of the MCL. Compositing of samples shall be done in the laboratory and analyzed within 14 days of sample collection. All of the following provisions apply to compositing:

(a) If the concentration in the composite sample is more than or equal to 0.0005 milligrams per liter for any contaminant listed in R 325.10604b, then a supplier shall take a follow-up sample within 14 days from each sampling point included in the composite and shall analyze the sample.

(b) If duplicates of the original sample taken from each sampling point used in the composite are available, the supplier may use these instead of resampling. A supplier shall analyze the duplicate and shall report the results to the department within 14 days of collection.

(c) The method for compositing samples specified in the provisions of 40 C.F.R. part 141, paragraph 141.24(f)(14)(iv) and (v), May 4, 2000, is adopted by reference. The adopted material is available from the superintendent of documents at the address in R 325.10116(b) for a cost of \$47.00 at the time of adoption of these rules. The adopted material is available for

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inspection, or copies are available at no cost from the offices of the department at the address in R 325.10116(a).

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1993 MR 6, Eff. July 2, 1993; 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10717

Source: 1998-2000 AACS.

R 325.10717a

Source: 1997 AACS.

R 325.10717b Special monitoring.

Rule 717b. (1) Unregulated contaminant monitoring requirements are contained in 40 C.F.R. §141.40. The department adopts by reference 40 C.F.R. §141.40 (January 11, 2001). The adopted material is available from the superintendent of documents at the address in R 325.10116(b) for a cost of \$47.00 at the time of adoption of these rules. The adopted material is available for inspection, or copies are available at no cost from the offices of the department at the address in R 325.10116(a).

(2) All of the following provisions apply to sodium monitoring:

(a) A supplier of water for a community water system shall collect and analyze 1 sample per plant at the entry point to the distribution system to determine sodium concentration levels. Samples shall be collected and analyzed annually for a system that utilizes surface water sources in whole or in part and not less than once every 3 years for a system that utilizes solely ground water sources. The minimum number of samples required to be taken by the system shall be based on the number of treatment plants used by the system, except that multiple wells drawing raw water from a single aquifer may be considered 1 treatment plant for determining the minimum number of samples.

(b) The supplier of water shall report to the department the results of the analyses for sodium as required in R 325.10734(1). If the department requires more than annual sampling, then the supplier shall report the average sodium concentration as required in R 325.10734(1) after taking the last sample used for the annual average.

(c) The supplier shall notify the local health department of the sodium levels within 3 months in writing. The supplier shall send a copy of the written notice to the state within 10 days of its issuance. The supplier is not required to send written notice to the local health department when the department provides the notice instead of the supplier.

(3) An analysis for a contaminant or parameter listed in this rule shall be conducted only by laboratories certified to conduct that analysis under part 27 of these rules or approved by the United States EPA.

History: 1989 MR 8, Eff. Sept. 13, 1989; 1991 MR 11, Eff. Nov. 22, 1991; 1993 MR 6, Eff. July 2, 1993; 1994 MR 12, Eff. Jan. 5, 1995; 1998 MR 3, Eff. Apr. 8, 1998; 2002 MR 10, Eff. May 30, 2002.

R 325.10717c

Source: 1993 AACS.

R 325.10718

Source: 1997 AACS.

R 325.10719

Source: 1993 AACS.

R 325.10719a

Source: 1984 AACS.

R 325.10719b

Source: 1984 AACS.

R 325.10719c

Source: 1984 AACS.

R 325.10719d

Source: 1984 AACS.

R 325.10720

Source: 1993 AACS.

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R 325.10721

Source: 1991 AACS.

R 325.10724

Source: 1997 AACS.

R 325.10728

Source: 1989 AACS.

R 325.10734 Required reporting to the department.

Rule 734. (1) Unless otherwise specified in this part, a supplier of water shall report to the department the results of a measurement or analysis required by this part within the first 10 days of the month following the month in which the results are received, or within the first 10 days following the end of the required monitoring period, whichever is sooner.

(2) Unless otherwise specified in these rules, a supplier of water shall report, to the department, within 48 hours, failing to comply with a state drinking water standard or other requirement under these rules, including failing to comply with a monitoring requirement under this part.

(3) A supplier of water shall not be required to report analytical results to the department in cases where the department laboratory performs the analysis and reports the results to the department.

(4) A public water system, upon discovering that a waterborne disease outbreak that is potentially attributable to that water system has occurred, shall report that occurrence to the department as soon as possible, but not later than the end of the next business day.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1991 MR 11, Eff. Nov. 22, 1991; 2002 MR 10, Eff. May 30, 2002.

R 325.10736 Rescinded.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; rescinded 2002 MR 10, Eff. May 30, 2002.

R 325.10737

Source: 1997 AACS.

R 325.10738 Rescinded.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; rescinded 2002 MR 10, Eff. May 30, 2002.

PART 8. GROUNDWATER SOURCES

R 325.10822

Source: 1991 AACS.

R 325.10831

Source: 1991 AACS.

R 325.10833

Source: 1997 AACS.

PART 10. TREATMENT SYSTEMS AND PUMPING FACILITIES

R 325.11002

Source: 1998-2000 AACS.

R 325.11004

Source: 1994 AACS.

R 325.11008

Source: 1991 AACS.

PART 11. DISTRIBUTION SYSTEMS AND STORAGE TANKS

R 325.11110
Source: 1991 AACS.

R 325.11117
Source: 1991 AACS.

PART 14. CROSS-CONNECTIONS

R 325.11404
Source: 1998-2000 AACS.

R 325.11405
Source: 1998-2000 AACS.

R 325.11406
Source: 1998-2000 AACS.

PART 15. OPERATION REPORTS AND RECORDKEEPING

R 325.11502
Source: 1991 AACS.

R 325.11503
Source: 1991 AACS.

R 325.11505a
Source: 1991 AACS.

R 325.11506 Retention of records.

Rule 1506. (1) A supplier of water of a community water system or a noncommunity water system shall retain on its premises, or at a convenient location near its premises, all of the following records:

(a) Records of bacteriological analyses required under part 7 of these rules shall be kept for not less than 5 years.
(b) Records of chemical analyses required under part 7 of these rules shall be kept for not less than 10 years unless otherwise indicated in this rule.

(c) Records of turbidity analyses required under part 7 of these rules shall be kept for not less than 5 years.

(d) Records of radiological analyses required under part 7 of these rules shall be kept for not less than 10 years.

(e) Original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, department determinations, and any other information required under R 325.10604f(2) to (5), R 325.10410, R 325.10710a, R 325.10710b, R 325.10710c, or R 325.10710d, shall be retained for not less than 12 years.

(2) Actual laboratory reports for chemical, bacteriological, turbidity, and radiological analyses shall be kept; however, the analyses data may be transferred to tabular summaries if all of the following information is included:

(a) The date, place, and time of sampling and the name of the person who collected the sample.

(b) Identification of the sample as a routine distribution system sample, check sample, raw or treated water sample, or other special purpose sample.

(c) The date of the analysis.

(d) The laboratory and the person who was responsible for performing the analysis.

(e) The analytical technique or method used.

(f) The results of the analysis.

(3) Records of action taken by the supplier to correct violations of the state drinking water standards shall be kept for not less than 3 years after the last action taken with respect to the particular violation.

(4) Copies of any written reports, summaries, or communications related to sanitary surveys of the public water supply and conducted by the supplier of the public water system itself, by a private consultant, by the division, or by a local, state, or federal agency shall be kept for not less than 10 years after completion of the sanitary survey involved.

(5) Records that involve a variance or an exemption granted to a public water supply shall be kept for not less than 5 years after the expiration date of the variance or exemption.

(6) Records that involve any emergency or public notification regarding a public water supply shall be kept for not less than

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3 years after the emergency or public notification.

History: 1954 ACS 94, Eff. Jan. 12, 1978; 1979 AC; 1994 MR 12, Eff. Jan. 5, 1995; 2002 MR 10, Eff. May 30, 2002.

PART 19. EXAMINATION AND CERTIFICATION OF OPERATORS

R 325.11901

Source: 1998-2000 AACS.

R 325.11902

Source: 1998-2000 AACS.

R 325.11903

Source: 1998-2000 AACS.

R 325.11904

Source: 1998-2000 AACS.

R 325.11905

Source: 1998-2000 AACS.

R 325.11906

Source: 1998-2000 AACS.

R 325.11906a

Source: 1998-2000 AACS.

R 325.11906b

Source: 1998-2000 AACS.

R 325.11907

Source: 1991 AACS.

R 325.11908

Source: 1998-2000 AACS.

R 325.11909

Source: 1991 AACS.

R 325.11910

Source: 1998-2000 AACS.

R 325.11911

Source: 1998-2000 AACS.

R 325.11912

Source: 1998-2000 AACS.

R 325.11913

Source: 1998-2000 AACS.

R 325.11914

Source: 1998-2000 AACS.

R 325.11915

Source: 1998-2000 AACS.

R 325.11915a

Source: 1998-2000 AACS.

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R 325.11916
Source: 1997 AACS.

R 325.11917
Source: 1998-2000 AACS.

PART 27. LABORATORY CERTIFICATION

R 325.12701
Source: 1994 AACS.

R 325.12702
Source: 1998-2000 AACS.

R 325.12705
Source: 1998-2000 AACS.

R 325.12706
Source: 1994 AACS.

PART 28. WELLHEAD PROTECTION GRANT ASSISTANCE

R. 325.12801
Source: 1998-2000 AACS.

R 325.12802
Source: 1998-2000 AACS.

R 325.12803
Source: 1998-2000 AACS.

R 325.12804
Source: 1998-2000 AACS.

R 325.12805
Source: 1998-2000 AACS.

R 325.12806
Source: 1998-2000 AACS.

R 325.12807
Source: 1998-2000 AACS.

R 325.12808
Source: 1998-2000 AACS.

R 325.12809
Source: 1998-2000 AACS.

R 325.12810
Source: 1998-2000 AACS.

R 325.12811
Source: 1998-2000 AACS.

R 325.12812
Source: 1998-2000 AACS.

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R 325.12813
Source: 1998-2000 AACS.

R 325.12814
Source: 1998-2000 AACS.

R 325.12815
Source: 1998-2000 AACS.

R 325.12816
Source: 1998-2000 AACS.

R 325.12817
Source: 1998-2000 AACS.

R 325.12818
Source: 1998-2000 AACS.

R 325.12819
Source: 1998-2000 AACS.

R 325.12820
Source: 1998-2000 AACS.

DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF LOCAL HEALTH SERVICES
LOCAL HEALTH PERSONNEL

R 325.13001
Source: 1980 AACS.

R 325.13002
Source: 1980 AACS.

R 325.13003
Source: 1980 AACS.

R 325.13004
Source: 1980 AACS.

R 325.13005
Source: 1980 AACS.

R 325.13006
Source: 1980 AACS.

R 325.13007
Source: 1980 AACS.

R 325.13008
Source: 1980 AACS.

R 325.13009
Source: 1980 AACS.

COST-SHARED SERVICES

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R 325.13051
Source: 1981 AACS.

R 325.13053
Source: 1981 AACS.

R 325.13055
Source: 1981 AACS.

R 325.13057
Source: 1981 AACS.

R 325.13059
Source: 1981 AACS.

R 325.13061
Source: 1981 AACS.

R 325.13063
Source: 1981 AACS.

R 325.13065
Source: 1981 AACS.

R 325.13067
Source: 1981 AACS.

R 325.13069
Source: 1981 AACS.

R 325.13071
Source: 1981 AACS.

DIVISION OF CHILD HEALTH
VISION SCREENING AND TESTING

R 325.13091
Source: 1981 AACS.

R 325.13092
Source: 1981 AACS.

R 325.13093
Source: 1981 AACS.

R 325.13094
Source: 1981 AACS.

R 325.13095
Source: 1981 AACS.

R 325.13096
Source: 1981 AACS.

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BUREAU OF HEALTH FACILITIES

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HOSPICE

PART 1. GENERAL PROVISIONS

R 325.13101
Source: 1984 AACS.

R 325.13102
Source: 1984 AACS.

R 325.13104
Source: 1984 AACS.

R 325.13105
Source: 1984 AACS.

R 325.13106
Source: 1984 AACS.

R 325.13107
Source: 1984 AACS.

R 325.13108
Source: 1984 AACS.

R 325.13109
Source: 1984 AACS.

R 325.13110
Source: 1984 AACS.

R 325.13111
Source: 1984 AACS.

PART 2. LICENSURE

R 325.13201
Source: 1984 AACS.

R 325.13202
Source: 1984 AACS.

R 325.13203
Source: 1984 AACS.

R 325.13204
Source: 1984 AACS.

R 325.13205
Source: 1984 AACS.

R 325.13206
Source: 1984 AACS.

R 325.13207
Source: 1984 AACS.

R 325.13208

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Source: 1984 AACS.

R 325.13209

Source: 1984 AACS.

R 325.13210

Source: 1984 AACS.

R 325.13211

Source: 1984 AACS.

R 325.13212

Source: 1984 AACS.

R 325.13213

Source: 1984 AACS.

PART 3. SERVICES

R 325.13301

Source: 1984 AACS.

R 325.13302

Source: 1984 AACS.

R 325.13303

Source: 1984 AACS.

R 325.13304

Source: 1984 AACS.

R 325.13305

Source: 1984 AACS.

R 325.13306

Source: 1984 AACS.

R 325.13307

Source: 1984 AACS.

PART 4. HEARING PROCEDURE

R 325.13401

Source: 1984 AACS.

R 325.13402

Source: 1984 AACS.

R 325.13403

Source: 1984 AACS.

R 325.13404

Source: 1984 AACS.

R 325.13405

Source: 1984 AACS.

R 325.13406

Source: 1984 AACS.

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R 325.13407
Source: 1984 AACS.

R 325.13408
Source: 1984 AACS.

R 325.13409
Source: 1984 AACS.

R 325.13410
Source: 1984 AACS.

R 325.13411
Source: 1984 AACS.

R 325.13412
Source: 1984 AACS.

R 325.13413
Source: 1984 AACS.

R 325.13414
Source: 1984 AACS.

R 325.13415
Source: 1984 AACS.

R 325.13416
Source: 1984 AACS.

R 325.13417
Source: 1984 AACS.

R 325.13418
Source: 1984 AACS.

DEPARTMENT OF COMMUNITY HEALTH
OFFICE OF SUBSTANCE ABUSE SERVICES
SUBSTANCE ABUSE SERVICE PROGRAM

PART 1. GENERAL PROVISIONS

R 325.14101
Source: 1981 AACS.

R 325.14102
Source: 1981 AACS.

R 325.14103
Source: 1981 AACS.

R 325.14104
Source: 1981 AACS.

R 325.14105
Source: 1981 AACS.

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R 325.14106
Source: 1981 AACS.

R 325.14107
Source: 1981 AACS.

R 325.14108
Source: 1981 AACS.

R 325.14109
Source: 1981 AACS.

R 325.14110
Source: 1981 AACS.

R 325.14111
Source: 1981 AACS.

R 325.14112
Source: 1981 AACS.

R 325.14113
Source: 1981 AACS.

R 325.14114
Source: 1981 AACS.

R 325.14115
Source: 1981 AACS.

R 325.14116
Source: 1988 AACS.

R 325.14117
Source: 1981 AACS.

R 325.14125
Source: 1981 AACS.

PART 2. LICENSURE OF SUBSTANCE ABUSE PROGRAMS

R 325.14201
Source: 1981 AACS.

R 325.14202
Source: 1981 AACS.

R 325.14203
Source: 1981 AACS.

R 325.14204
Source: 1981 AACS.

R 325.14205
Source: 1981 AACS.

R 325.14206
Source: 1981 AACS.

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R 325.14207
Source: 1981 AACS.

R 325.14208
Source: 1981 AACS.

R 325.14209
Source: 1981 AACS.

R 325.14210
Source: 1981 AACS.

R 325.14211
Source: 1981 AACS.

R 325.14212
Source: 1981 AACS.

R 325.14213
Source: 1981 AACS.

R 325.14214
Source: 1981 AACS.

PART 3. RECIPIENT RIGHTS

R 325.14301
Source: 1981 AACS.

R 325.14302
Source: 1981 AACS.

R 325.14303
Source: 1981 AACS.

R 325.14304
Source: 1981 AACS.

R 325.14305
Source: 1981 AACS.

R 325.14306
Source: 1981 AACS.

PART 4. METHADONE TREATMENT AND OTHER CHEMOTHERAPY

R 325.14401
Source: 1981 AACS.

R 325.14402
Source: 1981 AACS.

R 325.14403
Source: 1981 AACS.

R 325.14404
Source: 1981 AACS.

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R 325.14405
Source: 1981 AACS.

R 325.14406
Source: 1981 AACS.

R 325.14407
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R 325.14408
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R 325.14409
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R 325.14410
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R 325.14411
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R 325.14412
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R 325.14413
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R 325.14414
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R 325.14415
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R 325.14416
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R 325.14417
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R 325.14418
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R 325.14419
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R 325.14420
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R 325.14421
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R 325.14422
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R 325.14423
Source: 1981 AACS.

PART 5. PREVENTION

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R 325.14501
Source: 1981 AACS.

R 325.14521
Source: 1981 AACS.

R 325.14522
Source: 1981 AACS.

R 325.14523
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R 325.14524
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R 325.14525
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R 325.14526
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R 325.14527
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R 325.14528
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R 325.14529
Source: 1981 AACS.

R 325.14530
Source: 1981 AACS.

PART 6. CASEFINDING

R 325.14601
Source: 1981 AACS.

R 325.14602
Source: 1981 AACS.

R 325.14603
Source: 1981 AACS.

R 325.14621
Source: 1981 AACS.

R 325.14622
Source: 1981 AACS.

R 325.14623
Source: 1981 AACS.

PART 7. OUTPATIENT PROGRAMS

R 325.14701
Source: 1981 AACS.

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R 325.14702
Source: 1981 AACS.

R 325.14703
Source: 1981 AACS.

R 325.14704
Source: 1981 AACS.

R 325.14705
Source: 1981 AACS.

R 325.14706
Source: 1981 AACS.

R 325.14707
Source: 1981 AACS.

R 325.14708
Source: 1981 AACS.

R 325.14709
Source: 1981 AACS.

R 325.14710
Source: 1981 AACS.

R 325.14711
Source: 1981 AACS.

R 325.14712
Source: 1981 AACS.

PART 8. INPATIENT PROGRAMS

R 325.14801
Source: 1981 AACS.

R 325.14802
Source: 1981 AACS.

R 325.14803
Source: 1981 AACS.

R 325.14804
Source: 1981 AACS.

R 325.14805
Source: 1981 AACS.

R 325.14806
Source: 1981 AACS.

R 325.14807
Source: 1981 AACS.

PART 9. RESIDENTIAL PROGRAMS

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R 325.14901
Source: 1981 AACS.

R 325.14902
Source: 1981 AACS.

R 325.14903
Source: 1981 AACS.

R 325.14904
Source: 1981 AACS.

R 325.14905
Source: 1981 AACS.

R 325.14906
Source: 1981 AACS.

R 325.14907
Source: 1981 AACS.

R 325.14908
Source: 1981 AACS.

R 325.14909
Source: 1981 AACS.

R 325.14910
Source: 1981 AACS.

R 325.14911
Source: 1981 AACS.

R 325.14921
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R 325.14922
Source: 1981 AACS.

R 325.14923
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R 325.14924
Source: 1981 AACS.

R 325.14925
Source: 1981 AACS.

R 325.14926
Source: 1981 AACS.

R 325.14927
Source: 1981 AACS.

R 325.14928
Source: 1981 AACS.

DEPARTMENT OF ENVIRONMENTAL QUALITY

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DIVISION OF OCCUPATIONAL HEALTH
CLASS IV DRY CLEANING ESTABLISHMENTS

PART 1. GENERAL PROVISIONS

R 325.17101
Source: 1981 AACS.

R 325.17102
Source: 1981 AACS.

R 325.17103
Source: 1981 AACS.

R 325.17104
Source: 1981 AACS.

R 325.17105
Source: 1981 AACS.

R 325.17106
Source: 1981 AACS.

R 325.17107
Source: 1981 AACS.

R 325.17108
Source: 1981 AACS.

R 325.17109
Source: 1981 AACS.

PART 2. DRAWINGS

R 325.17201
Source: 1981 AACS.

R 325.17202
Source: 1987 AACS.

R 325.17203
Source: 1981 AACS.

R 325.17204
Source: 1981 AACS.

R 325.17205
Source: 1981 AACS.

R 325.17206
Source: 1981 AACS.

R 325.17207
Source: 1981 AACS.

R 325.17208
Source: 1981 AACS.

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R 325.17209
Source: 1981 AACS.

R 325.17210
Source: 1981 AACS.

PART 3. LICENSURE

R 325.17301
Source: 1987 AACS.

R 325.17302
Source: 1987 AACS.

R 325.17303
Source: 1981 AACS.

R 325.17304
Source: 1981 AACS.

R 325.17305
Source: 1981 AACS.

R 325.17306
Source: 1981 AACS.

R 325.17307
Source: 1981 AACS.

R 325.17308
Source: 1981 AACS.

R 325.17309
Source: 1981 AACS.

PART 4. DRY CLEANING MACHINE REQUIREMENTS

R 325.17401
Source: 1981 AACS.

R 325.17402
Source: 1981 AACS.

R 325.17403
Source: 1981 AACS.

R 325.17404
Source: 1981 AACS.

R 325.17405
Source: 1981 AACS.

R 325.17406
Source: 1981 AACS.

R 325.17407
Source: 1981 AACS.

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R 325.17408
Source: 1981 AACS.

R 325.17409
Source: 1981 AACS.

PART 5. BUILDING REQUIREMENTS

R 325.17501
Source: 1981 AACS.

R 325.17502
Source: 1981 AACS.

R 325.17503
Source: 1981 AACS.

R 325.17504
Source: 1981 AACS.

R 325.17505
Source: 1981 AACS.

R 325.17506
Source: 1981 AACS.

R 325.17507
Source: 1981 AACS.

R 325.17508
Source: 1981 AACS.

R 325.17509
Source: 1981 AACS.

R 325.17510
Source: 1981 AACS.

PART 7. INSTALLATION, OPERATION, AND VENTILATION

R 325.17701
Source: 1981 AACS.

R 325.17702
Source: 1981 AACS.

R 325.17703
Source: 1981 AACS.

R 325.17704
Source: 1981 AACS.

R 325.17705
Source: 1981 AACS.

R 325.17706
Source: 1981 AACS.

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R 325.17707
Source: 1981 AACS.

R 325.17708
Source: 1981 AACS.

R 325.17709
Source: 1981 AACS.

R 325.17710
Source: 1981 AACS.

R 325.17711
Source: 1981 AACS.

R 325.17712
Source: 1981 AACS.

PART 9. INSPECTIONS OF DRY CLEANING ESTABLISHMENTS

R 325.17901
Source: 1981 AACS.

R 325.17902
Source: 1981 AACS.

R 325.17903
Source: 1981 AACS.

R 325.17904
Source: 1981 AACS.

R 325.17905
Source: 1981 AACS.

R 325.17906
Source: 1981 AACS.

PART 10. CONTESTED CASES

R 325.18001
Source: 1981 AACS.

R 325.18002
Source: 1981 AACS.

R 325.18003
Source: 1981 AACS.

R 325.18004
Source: 1981 AACS.

R 325.18005
Source: 1981 AACS.

R 325.18006
Source: 1981 AACS.

PART 11. TYPICAL DESIGN PRINTS AND DIAGRAMS

R 325.18101
Source: 1981 AACS.

R 325.18102
Source: 1981 AACS.

R 325.18103
Source: 1981 AACS.

R 325.18104
Source: 1981 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES
OCCUPATIONAL HEALTH STANDARDS COMMISSION
PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS

R 325.18301
Source: 1998-2000 AACS.

R 325.18302
Source: 1998-2000 AACS.

HEALTH FACILITIES SERVICES ADMINISTRATION
NURSING HOMES AND NURSING CARE FACILITIES

PART 1. GENERAL PROVISIONS

R 325.20101
Source: 1981 AACS.

R 325.20102
Source: 1981 AACS.

R 325.20103
Source: 1981 AACS.

R 325.20104
Source: 1983 AACS.

R 325.20106
Source: 1981 AACS.

R 325.20107
Source: 1981 AACS.

R 325.20108
Source: 1981 AACS.

R 325.20109
Source: 1981 AACS.

R 325.20110
Source: 1981 AACS.

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R 325.20111
Source: 1981 AACS.

R 325.20112
Source: 1981 AACS.

R 325.20113
Source: 1983 AACS.

R 325.20114
Source: 1981 AACS.

R 325.20115
Source: 1981 AACS.

R 325.20116
Source: 1981 AACS.

R 325.20117
Source: 1983 AACS.

R 325.20118
Source: 1981 AACS.

PART 2. LICENSURE

R 325.20201
Source: 1981 AACS.

R 325.20202
Source: 1981 AACS.

R 325.20203
Source: 1981 AACS.

R 325.20204
Source: 1981 AACS.

R 325.20205
Source: 1981 AACS.

R 325.20206
Source: 1983 AACS.

R 325.20207
Source: 1981 AACS.

R 325.20208
Source: 1981 AACS.

R 325.20209
Source: 1981 AACS.

R 325.20210
Source: 1981 AACS.

R 325.20211
Source: 1981 AACS.

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R 325.20212
Source: 1981 AACS.

R 325.20213
Source: 1981 AACS.

R 325.20214
Source: 1981 AACS.

R 325.20215
Source: 1981 AACS.

PART 3. ACCESS TO NURSING HOMES AND PATIENTS

R 325.20301
Source: 1981 AACS.

R 325.20302
Source: 1983 AACS.

R 325.20303
Source: 1983 AACS.

R 325.20304
Source: 1983 AACS.

PART 4. ADMINISTRATIVE MANAGEMENT OF HOMES

R 325.20401
Source: 1981 AACS.

R 325.20402
Source: 1981 AACS.

R 325.20403
Source: 1981 AACS.

R 325.20404
Source: 1983 AACS.

R 325.20405
Source: 1981 AACS.

R 325.20406
Source: 1983 AACS.

R 325.20407
Source: 1981 AACS.

PART 5. PATIENT CARE

R 325.20501
Source: 1981 AACS.

R 325.20502
Source: 1983 AACS.

R 325.20503

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Source: 1981 AACS.

R 325.20504

Source: 1981 AACS.

R 325.20505

Source: 1981 AACS.

R 325.20506

Source: 1981 AACS.

R 325.20507

Source: 1981 AACS.

R 325.20508

Source: 1981 AACS.

R 325.20509

Source: 1981 AACS.

PART 6. PHYSICIAN SERVICES

R 325.20601

Source: 1981 AACS.

R 325.20602

Source: 1981 AACS.

R 325.20603

Source: 1983 AACS.

R 325.20604

Source: 1981 AACS.

R 325.20605

Source: 1983 AACS.

R 325.20606

Source: 1981 AACS.

PART 7. NURSING SERVICES

R 325.20701

Source: 1983 AACS.

R 325.20702

Source: 1983 AACS.

R 325.20703

Source: 1986 AACS.

R 325.20704

Source: 1986 AACS.

R 325.20705

Source: 1981 AACS.

R 325.20706

Source: 1981 AACS.

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R 325.20707
Source: 1983 AACS.

R 325.20708
Source: 1981 AACS.

R 325.20709
Source: 1984 AACS.

R 325.20710
Source: 1981 AACS.

R 325.20711
Source: 1983 AACS.

R 325.20712
Source: 1983 AACS.

R 325.20713
Source: 1981 AACS.

R 325.20714
Source: 1983 AACS.

PART 8. DIETARY SERVICES

R 325.20801
Source: 1983 AACS.

R 325.20802
Source: 1981 AACS.

R 325.20803
Source: 1981 AACS.

R 325.20804
Source: 1983 AACS.

R 325.20805
Source: 1981 AACS.

R 325.20806
Source: 1983 AACS.

PART 9. PHARMACEUTICAL SERVICES

R 325.20901
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DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

OCCUPATIONAL HEALTH STANDARDS

OCCUPATIONAL HEALTH STANDARDS--CARCINOGENS

R 325.35001 Scope and application.

Rule 1. (1) These rules apply to any area in which the following 13 carcinogens are manufactured, processed, repackaged, released, handled, or stored, but shall not apply to transshipment in sealed containers, except for the labeling requirements under R 325.35008:

- (a) 4-Nitrobiphenyl, chemical abstracts service register number (CAS No.) 92933.
- (b) alpha-Naphthylamine, CAS No. 134327.
- (c) methyl chloromethyl ether, CAS No. 107302.
- (d) 3,3'-Dichlorobenzidine (and its salts) CAS No. 91941.
- (e) bis-Chloromethyl ether, CAS No. 542881.
- (f) beta-Naphthylamine, CAS No. 91598.
- (g) Benzidine, CAS No. 92875.
- (h) 4-Aminodiphenyl, CAS No. 92671.
- (i) Ethyleneimine, CAS No. 151564.
- (j) beta-Propiolactone, CAS No. 57578.
- (k) 2-Acetylaminofluorene, CAS No. 53963.
- (l) 4-Dimethylaminoazo-benzene, CAS No. 60117.
- (m) N-Nitrosodimethylamine, CAS No. 62759.

(2) These rules shall not apply to the following:

- (a) Solid or liquid mixtures containing less than 0.1% by weight or volume of any of the following:

- (i) 4-Nitrobiphenyl.
- (ii) Methyl chloromethyl ether.
- (iii) Bis-chloromethyl ether.
- (iv) Beta-Naphthylamine.
- (v) Benzidine.
- (vi) 4-Aminodiphenyl.

- (b) Solid or liquid mixtures containing less than 1.0% by weight or volume of any of the following:

- (i) Alpha-Naphthylamine.
- (ii) 3,3'-Dichlorobenzidine (and its salts).
- (iii) Ethyleneimine.
- (iv) Beta-Propiolactone.
- (v) 2-Acetylaminofluorene.

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- (vi) 4-Dimethylaminoazobenzene.

- (vii) N-Nitrosodimethylamine.

(3) These rules replace OH rules 2301 and 2302.

History: 2002 MR 18, Eff. Sept. 27, 2002.

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R 325.35002 Definitions.

Rule 2. As used in these rules:

- (a) "Absolute filter" means a filter capable of retaining 99.97% of a mono disperse aerosol of 0.3 μ m particles.
- (b) "Authorized employee" means an employee whose duties require him or her to be in the regulated area and who has been specifically assigned by the employer.
- (c) "Carcinogens" means all materials covered in the scope of these rules as described in R 325.35001.
- (d) "Clean change room" means a room where employees put on clean clothing, protective equipment, or both, in an environment free of the 13 carcinogens.
- (e) "Closed system" means an operation involving a carcinogen where containment prevents the release of the material into regulated areas, non-regulated areas, or the external environment.
- (f) "Decontamination" means the inactivation of a carcinogen or its safe disposal.
- (g) "Disposal" means the safe removal of the carcinogens from the work environment.
- (h) "Emergency" means an unforeseen circumstance or set of circumstances resulting in the release of a carcinogen that may result in exposure to or contact with the material.
- (i) "External environment" means any environment external to regulated and nonregulated areas.
- (j) "Isolated system" means a fully enclosed structure other than the vessel of containment of a carcinogen that is impervious to the passage of the material and would prevent the entry of the carcinogen into regulated areas, nonregulated areas, or the external environment if leakage or spillage from the vessel of containment occurs.
- (k) "Laboratory-type hood" means a device which is enclosed on the 3 sides and the top and bottom, which is designed and maintained so as to draw air inward at an average linear face velocity of 150 feet per minute with a minimum of 125 feet per minute, and which is designed, constructed, and maintained so that an operation involving a carcinogen within the hood does not require the insertion of any portion of any employee's body other than his or her hands and arms.
- (l) "Nonregulated area" means any area under the control of the employer where entry and exit is neither restricted nor controlled.
- (m) "Open-vessel system" means an operation involving a carcinogen in an open vessel that is not in an isolated system, a laboratory-type hood, nor in any other system affording equivalent protection against the entry of the material into regulated areas, non-regulated areas, or the external environment.
- (n) "Protective clothing" means clothing designed to protect an employee against contact with or exposure to a carcinogen.
- (o) "Regulated area" means an area where entry and exit is restricted and controlled.

History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35003 Requirements for areas containing a carcinogen.

Rule 3. (1) An employer shall ensure that a regulated area be established where a carcinogen is manufactured, processed, used, repackaged, released, handled, or stored.

(2) All areas shall be controlled in accordance with the requirements for the following category or categories describing the operation involved:

(a) Isolated systems. An employer shall ensure that if an isolated system is used, the employees working with a carcinogen within an isolated system such as a "glove box" wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system.

(b) Closed system operation. An employer shall ensure that access to regulated areas be restricted to authorized employees where the carcinogens are stored in sealed containers, or contained in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within.

(4) If employees are exposed to any of the following then employers shall ensure that employees wash hands, forearms, face, and neck upon each exit from the regulated areas, close to the point of exit, and before engaging in other activities:

- (a) 4-Nitrobiphenyl.
- (b) Alpha-Naphthylamine.
- (c) 3,3'-Dichlorobenzidine (and its salts).
- (d) Beta-Naphthylamine.
- (e) Benzidine.
- (f) 4-Aminodiphenyl.
- (g) 2-Acetylaminofluorene.
- (h) 4-Dimethylaminoazo-benzene.
- (i) N-Nitrosodimethylamine.

(5) An employer shall ensure that open-vessel system operations as defined in R 325.35002(l) are prohibited.

(6) An employer shall ensure compliance with all of the following provisions when operations involve "laboratory-type

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hoods” or are in locations where carcinogens are contained in an otherwise “closed system,” but are transferred, charged, or discharged into other normally closed containers:

- (a) Access shall be restricted to authorized employees only.
- (b) Each operation shall be provided with continuous local exhaust ventilation so that air movement is always from ordinary work areas to the operation. Exhaust air shall not be discharged to regulated areas, nonregulated areas, or the external environment unless decontaminated. Clean makeup air shall be introduced in sufficient volume to maintain the correct operation of the local exhaust system.
- (c) Employees shall be provided with, and required to wear, clean, full body protective clothing, such as smocks, coveralls, or long-sleeved shirt and pants, shoe covers, and gloves before entering a regulated area.
- (d) Employees engaged in handling operations involving carcinogens shall be provided with, and required to wear and use, a half-face filter-type respirator with filters for dusts, mists, and fumes, or air-purifying canisters or cartridges. A respirator affording higher levels of protection than a half-face filter-type respirator may be substituted.
- (e) Before each exit from a regulated area, an employer shall require employees to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day and to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of the impervious containers shall be identified in accordance with R 325.35008.
- (f) Drinking fountains are prohibited in a regulated area.
- (g) Employees shall be required to wash hands, forearms, face, and neck on each exit from the regulated area, close to the point of exit, and before engaging in other activities. An employer shall require employees exposed to any of the following to shower after the last exit of the day:
 - (i) 4-Nitrobiphenyl.
 - (ii) Alpha-Naphthylamine.
 - (iii) 3,3'-Dichlorobenzidine (and its salts).
 - (iv) Beta-Naphthylamine.
 - (v) Benzidine.
 - (vi) 4-Aminodiphenyl.
 - (vii) 2-Acetylaminofluorene.
 - (viii) 4-Dimethylaminoazo-benzene.
 - (ix) N-Nitrosodimethylamine.
- (7) If cleanup of leaks of spills, maintenance, or repair operations on contaminated systems or equipment, or any operations involving work in an area where direct contact with a carcinogen could result, then an employer shall ensure that each authorized employee entering that area comply to all of the following requirements:
 - (a) Wear clean, impervious garments, including gloves, boots, and a continuous air-supplied hood in accordance with 29 C.F.R. §1910.134 as adopted by reference in occupational health standard R 325.60051 et seq. being Part 451. Respiratory Protection.
 - (b) Be decontaminated before removing the protective garments and hood.
 - (c) Shower upon removing the protective garments and hood.
- (8) Laboratory activities. All of the following requirements apply to research and quality control activities involving the use of a carcinogen:
 - (a) Mechanical pipetting aids shall be used for all pipetting procedures.
 - (b) Experiments, procedures, and equipment that could produce aerosols shall be confined to laboratory-type hoods or glove boxes.
 - (c) Surfaces on which a carcinogen is handled shall be protected from contamination.
 - (d) Contaminated wastes and animal carcasses shall be collected in impervious containers that are closed and decontaminated before removal from the work area. The wastes and carcasses shall be incinerated in a manner so that carcinogenic products are not released.
 - (e) All other forms of carcinogens shall be inactivated before disposal.
 - (f) Laboratory vacuum systems shall be protected with high-efficiency scrubbers or with disposable absolute filters.
 - (g) An employer shall ensure that all of the following provisions are met for employees engaged in animal support activities:
 - (i) Employees shall be provided, and required to wear, a complete protective clothing change, clean each day, including coveralls, or pants and shirt, foot covers, head covers, gloves, and appropriate respiratory protective equipment or devices.
 - (ii) Employees shall remove and leave protective clothing and equipment at the point of exit before each exit from a regulated area and at the last exit of the day and place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. Containers shall comply with requirements set forth in R 325.35008.
 - (iii) Employees shall wash hands, forearms, face, and neck upon each exit from a regulated area close to the point of exit and before engaging in other activities.

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- (iv) Employees shall shower after the last exit of the day.
 - (h) An employer shall ensure that all of the following provisions are met for employees engaged in animal support activities:
 - (i) Provide, and require employees to wear, a clean change of appropriate laboratory clothing, such as a solid front gown, surgical scrub suit, or fully buttoned laboratory coat.
 - (ii) Employees shall remove and leave protective clothing and equipment at the point of exit before each exit from a regulated area and at the last exit of the day and place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. Containers shall comply with the requirements set forth in R 325.35008.
 - (iii) Employees shall wash hands, forearms, face, and neck upon each exit from the regulated area close to the point of exit and before engaging in other activities.
 - (i) Air pressure in laboratory areas and animal rooms where a carcinogen is handled and bioassay studies are performed shall be negative in relation to the pressure in surrounding areas. Exhaust air shall not be discharged to regulated areas, nonregulated areas, or the external environment unless decontaminated.
 - (j) There shall not be a connection between regulated areas and any other areas through the ventilation system.
 - (k) An employer shall maintain a current inventory of carcinogens.
 - (l) Ventilated apparatus, such as laboratory-type hoods, shall be tested at least semiannually or immediately after ventilation modification or maintenance operations, by personnel who are fully qualified to certify correct containment and operation.
- History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35004 General regulated area requirements.

- Rule 4. (1) A daily roster of employees entering regulated areas shall be established and maintained. The rosters or a summary of the rosters shall be retained for a period of 20 years. The rosters or summaries shall be provided upon request to the director or his or her authorized representative. If an employer ceases business without a successor, then rosters shall be forwarded by registered mail to the director.
- (2) An employer shall implement a respiratory protection program in accordance with 29 C.F.R. 1910.134 (b), (c), (d), (except (d)(1)(iii) and (iv), and (d)(3)), and (e) through (m) as adopted by reference in R 325.60051 et seq. being Part 451. Respiratory Protection.
 - (3) An employer shall ensure that in an emergency, immediate measures are implemented, including, but not limited to, all of the following measures:
 - (a) Evacuate the potentially affected area as soon as the emergency has been determined.
 - (b) Eliminate the hazardous conditions created by the emergency and decontaminate the potentially affected area before resuming normal operations.
 - (c) Special medical surveillance by a physician shall be instituted within 24 hours for employees present in the potentially affected area at the time of the emergency. A report of the medical surveillance and any treatment shall be included in the incident report in accordance with R 325.35010.
 - (d) Employees shall shower as soon as possible, unless contraindicated by physical injuries, when an employee has a known contact with a carcinogen.
 - (e) An incident report on the emergency shall be reported in accordance with R 325.35010.
 - (f) Emergency deluge showers and eyewash fountains supplied with running potable water shall be located near, within sight of, and on the same level as, locations where a direct exposure to ethyleneimine or beta-Propiolactone only would be most likely as a result of equipment failure or improper work practice.
- History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35005 Hygiene facilities and practices.

- Rule 5. (1) An employer shall take measures to prevent all of the following in regulated areas:
- (a) The storage or consumption of food.
 - (b) The storage or use of containers of beverages.
 - (c) The storage or application of cosmetics.
 - (d) Smoking.
 - (e) The storage of smoking materials, tobacco products, or other products for chewing.
 - (f) The chewing of the items specified in subdivision (e) of this subrule.
- (2) If employees are required by these rules to wash, then washing facilities shall be provided in accordance with occupational health rule 4201(4), being Part 474. Sanitation.
 - (3) If employees are required by these rules to shower, then shower facilities shall be provided in accordance with occupational health rule 4201(4), being Part 474. Sanitation.
 - (4) If employees wear protective clothing and equipment, then clean change rooms shall be provided for the number of employees who are required to change clothes in accordance with occupational health rule 4201(5), being Part 474.

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Sanitation.

(5) Clean change room shall be contiguous to and have an entry from a shower room.

(6) If toilets are in regulated areas, then the toilets shall be in a separate room.

History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35006 Contamination control.

Rule 6. (1) An employer shall ensure that regulated areas are maintained under pressure negative with respect to nonregulated areas, except for outdoor systems. Local exhaust ventilation may be used to satisfy this requirement. Clean makeup air in equal volume shall replace air that is removed.

(2) Equipment, material, or other items shall be taken into, or removed from, a regulated area in a manner that does not cause contamination in nonregulated areas or the external environment.

(3) Decontamination procedures shall be established and implemented to remove carcinogens from the surfaces of materials, equipment, and the decontamination facility.

(4) Dry sweeping and dry mopping are prohibited for all of the following:

(a) 4-Nitrobiphenyl.

(b) Alpha-Naphthylamine.

(c) 3,3'-Dichlorobenzidine (and its salts).

(d) Beta-Naphthylamine.

(e) Benzidine.

(f) 4-Aminodiphenyl.

(g) 2-Acetylaminofluorene.

(h) 4-Dimethylaminoazo-benzene.

(i) N-Nitrosodimethylamine.

History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35007 Signs.

Rule 7. (1) An employer shall ensure that entrances to regulated areas are posted with signs bearing the following legend:

CANCER-SUSPECT AGENT
AUTHORIZED PERSONNEL ONLY

(2) An employer shall ensure that entrances to regulated areas containing operations covered in R 325.35003(7) be posted with signs bearing the following legend:

CANCER-SUSPECT AGENT EXPOSED IN THIS AREA
IMPERVIOUS SUIT INCLUDING GLOVES, BOOTS,
AND AIR-SUPPLIED HOOD REQUIRED AT ALL TIMES
AUTHORIZED PERSONNEL ONLY

(3) An employer shall ensure that appropriate signs and instructions are posted at the entrance to, and exit from, regulated areas, informing employees of the procedures that must be followed in entering and leaving a regulated area.

(4) An employer shall ensure that lettering on signs and instructions is a minimum letter height of 2 inches (5 cm).

History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35008 Container labeling.

Rule 8. (1) An employer shall ensure that all of the following labeling requirements are complied with:

(a) Containers of a carcinogen and containers required in R 325.35003(6)(e) and (8)(g)(ii) and (h)(ii) that are accessible only to and handled only by authorized employees or by other employees trained in compliance with R 325.35009 may have labeling limited to a generic or proprietary name or other proprietary identification of the carcinogen and percent.

(b) Containers of a carcinogen and containers required in R 325.35003(6)(e) and (8)(g)(ii) and (h)(ii) that are accessible to or handled by employees other than authorized employees or employees trained in compliance with R 325.35009 shall have contents identification that includes the full chemical name and chemical abstracts service registry number as listed in R 325.35001(1).

(c) Containers shall have the warning words "CANCER-SUSPECT AGENT" displayed immediately under or adjacent to the contents identification.

(d) Containers that have contents which are carcinogens with corrosive or irritating properties shall have label statements

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warning of the hazards noting, if appropriate, particularly sensitive or affected portions of the body.

(e) Labels on containers shall be not less than 1/2 the size of the largest lettering on the package and be not less than 8-point type if the lettering is not required to be more than 1 inch (2.5 cm) in height.

(f) Nothing shall appear on or near any required sign, label, or instruction that contradicts or detracts from the effect of any required warning, information, or instruction.

History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35009 Training and indoctrination.

Rule 9. (1) An employer shall ensure that each authorized employee, before entering a regulated area and annually, receives training that includes, but is not limited to, all of the following:

(a) The nature of the carcinogenic hazards of a carcinogen to include local and systemic toxicity.

(b) The specific nature of the operation involving a carcinogen that could result in exposure.

(c) The purpose for and application of the medical surveillance program, including, as appropriate, methods of self-examination.

(d) The purpose for and application of decontamination practices and purposes.

(e) The purpose for and significance of emergency practices and procedures.

(f) The employee's specific role in emergency procedures.

(g) Specific information to aid the employee in recognition and evaluation of conditions and situations which may result in the release of a carcinogen.

(h) The purpose for and application of specific first aid procedures and practices.

(2) An employer shall ensure that specific emergency procedures are prescribed, and posted and that employees are familiarized with emergency procedures terminology, and that the procedures are rehearsed.

(3) All materials relating to the program shall be provided upon request to the director of the department of consumer and industry services or his or her authorized representative.

History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35010 Reports.

Rule 10. (1) An employer shall report, in writing, all of the following to the director of the department of consumer and industry services:

(a) A brief description and in-plant location of the area or areas regulated and the address of each regulated area.

(b) The name or names and other identifying information of a carcinogen in each regulated area.

(c) The number of employees in each regulated area, during normal operations, including maintenance activities.

(d) The manner in which carcinogens are present in each regulated area, whether it is manufactured, processed, used, repackaged, released, stored, or otherwise handled.

Any changes in the information specified in this subrule shall be similarly reported, in writing, within 15 calendar days of the change.

(2) An employer shall ensure that incidents that result in the release of a carcinogen into any area where employees may be potentially exposed are reported in accordance with all of the following provisions:

(a) A report of the occurrence of the incident and the facts obtainable at that time, including a report on any medical treatment of affected employees, shall be made within 24 hours to the director of the department of consumer and industry services.

(b) A written report shall be filed with the director of the department of consumer and industry services within 15 calendar days. The report shall contain all of the following information:

(i) A specification of the amount of material released, the amount of time involved, and an explanation of the procedure used in determining the amount of material released.

(ii) A description of the area involved and the extent of known and possible employee exposure and area contamination.

(iii) A report of any medical treatment of affected employees and any medical surveillance program implemented.

(iv) An analysis of the circumstances of the incident and measures taken or to be taken, with specific completion dates, to avoid further similar releases.

History: 2002 MR 18, Eff. Sept. 27, 2002.

R 325.35011 Medical surveillance, examinations, and medical records.

Rule 11. (1) An employer shall establish and implement, at no cost to employees, a medical surveillance program for employees considered for assignment to enter regulated areas.

(2) An employer shall ensure that a preassignment physical examination by a physician is provided before an employee is assigned to enter a regulated area. The examination shall include the personal history of the employee, family, and occupational background, including genetic and environmental factors.

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(3) An employer shall provide periodic physical examinations, at least annually, for authorized employees after the preassignment examination.

(4) For all physical examinations, an employer shall ensure that the examining physician consider whether there exist conditions of increased risk, including reduced immunological competence, treatment with steroids or cytotoxic agents, pregnancy, or cigarette smoking.

(5) Employers of employees examined pursuant to this rule shall maintain complete and accurate records of all medical examinations. Records shall be maintained for the duration of the employee's employment. Upon termination of the employee's employment, including retirement or death, or if the employer ceases business without a successor, records, or notarized true copies of records shall be forwarded, by registered mail, to the director of the department of consumer and industry services.

(6) An employer shall ensure that records required by this rule be provided upon request in compliance with R 325.3451 et seq., except R 325.3472 and R 325.3472a, being Part 470. Medical Records and Trade Secrets. The records shall also be provided, upon request, to the director of the department of consumer and industry services.

(7) A physician who conducts a medical examination required by this rule shall furnish, to the employer, a statement of the employee's suitability for employment in the specific exposure.

History: 2002 MR 18, Eff. Sept. 27, 2002.

MEDICAL SERVICES AND FIRST AID—GENERAL INDUSTRY

R 325.47201

Source: 2001 AACS.

ILLUMINATION

R 325.47801

Source: 2001 AACS.

METHYLENEDIANILINE (MDA)

R 325.50051

Source: 1993 AACS.

R 325.50052

Source: 1998-2000 AACS.

R 325.50053

Source: 1993 AACS.

R 325.50054

Source: 1998-2000 AACS.

R 325.50055

Source: 1993 AACS.

R 325.50056

Source: 1993 AACS.

R 325.50057

Source: 1993 AACS.

R 325.50058

Source: 1993 AACS.

R 325.50059

Source: 1993 AACS.

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R 325.50060
Source: 1998-2000 AACS.

R 325.50061
Source: 1993 AACS.

R 325.50062
Source: 1993 AACS.

R 325.50063
Source: 1993 AACS.

R 325.50064
Source: 1993 AACS.

R 325.50065
Source: 1993 AACS.

R 325.50066
Source: 1993 AACS.

R 325.50067
Source: 1993 AACS.

R 325.50068
Source: 1993 AACS.

R 325.50069
Source: 1993 AACS.

R 325.50070
Source: 1993 AACS.

R 325.50071
Source: 1993 AACS.

R 325.50072
Source: 1993 AACS.

R 325.50073
Source: 1993 AACS.

R 325.50074
Source: 1998-2000 AACS.

R 325.50075
Source: 1998-2000 AACS.

R 325.50076
Source: 1998-2000 AACS.

1,3-BUTADIENE

R 325.50091
Source: 1997 AACS.

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R 325.50092

Source: 1998-2000 AACS.

COKE OVEN EMISSIONS

R 325.50101

Source: 1998-2000 AACS.

R 325.50102

Source: 1998-2000 AACS.

R 325.50106

Source: 1987 AACS.

R 325.50107

Source: 1987 AACS.

R 325.50108

Source: 1987 AACS.

R 325.50109

Source: 1987 AACS.

R 325.50117

Source: 1998-2000 AACS.

R 325.50118

Source: 1998-2000 AACS.

R 325.50124

Source: 1998-2000 AACS.

R 325.50125

Source: 1998-2000 AACS.

R 325.50136

Source: 1998-2000 AACS.

R 325.50151

Source: 1998-2000 AACS.

PART 501. AGRICULTURAL OPERATIONS

R 325.50171 Agricultural Operations.

(1)(a) The standards referenced in the remaining paragraphs of this subsection apply to the indicated operations, whether or not they are agricultural operations. [1910.267(a)(1)]

(b) Sanitation in temporary labor camps--see Rule 4301. [1910.267(a)(2)]

(c) Pulpwood logging--see Rule 5006. [1910.267(a)(4)]

(2) Occupational health standards in existence on December 31, 1974 being R 325.2401 to R 325.2448 which do not cover the same subject as the standards referred to in paragraphs (b) and (c) of subsection (1) of this rule continue to apply to agricultural operations pursuant to section 24(3) of MIOSHA.

(3) Except to the extent specified in subsections (1) and (2) of this rule, the standards contained in the Occupational Health Rules for General Industry do not apply to agricultural operations. [1910.267(b)]

(4) This rule replaces OH rule 5007.

History: 2002 MR 23, Eff. Dec. 11, 2002.

OCCUPATIONAL HEALTH STANDARDS

PART 2. TUNNELS, SHAFTS, CAISSONS, AND COFFERDAMS

R 325.50201
Source: 1997 AACS.

R 325.50202
Source: 1997 AACS.

R 325.50203
Source: 1997 AACS.

R 325.50204
Source: 1997 AACS.

R 325.50205
Source: 1997 AACS.

R 325.50206
Source: 1997 AACS.

R 325.50207
Source: 1997 AACS.

R 325.50208
Source: 1997 AACS.

R 325.50209
Source: 1997 AACS.

R 325.50210
Source: 1997 AACS.

R 325.50211
Source: 1997 AACS.

R 325.50212
Source: 1997 AACS.

R 325.50213
Source: 1997 AACS.

R 325.50214
Source: 1997 AACS.

R 325.50215
Source: 1997 AACS.

R 325.50216
Source: 1997 AACS.

R 325.50217
Source: 1997 AACS.

R 325.50218
Source: 1997 AACS.

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R 325.50219
Source: 1997 AACS.

R 325.50220
Source: 1997 AACS.

R 325.50221
Source: 1997 AACS.

R 325.50222
Source: 1997 AACS.

R 325.50223
Source: 1997 AACS.

R 325.50224
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R 325.50225
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R 325.50226
Source: 1997 AACS.

R 325.50227
Source: 1997 AACS.

R 325.50228
Source: 1997 AACS.

R 325.50229
Source: 1997 AACS.

R 325.50230
Source: 1997 AACS.

R 325.50231
Source: 1997 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

DIRECTOR'S OFFICE

OCCUPATIONAL HEALTH STANDARDS--ABRASIVE BLASTING

R 325.50251
Source: 2001 AACS.

R 325.50252
Source: 2001 AACS.

R 325.50253
Source: 2001 AACS.

R 325.50254
Source: 2001 AACS.

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R 325.50255
Source: 2001 AACS.

R 325.50256
Source: 2001 AACS.

R 325.50257
Source: 2001 AACS.

R 325.50258
Source: 2001 AACS.

ILLUMINATION

R 325.50902
Source: 2001 AACS.

R 325.51004
Source: 2001 AACS.

AIR CONTAMINANTS

R 325.51101
Source: 2001 AACS.

R 325.51103
Source: 2001 AACS.

R 325.51104
Source: 2001 AACS.

R 325.51105
Source: 2001 AACS.

R 325.51106
Source: 2001 AACS.

R 325.51107
Source: 1990 AACS.

R 325.51108
Source: 2001 AACS.

ETHYLENE OXIDE

R 325.51151
Source: 1993 AACS.

R 325.51152
Source: 1998-2000 AACS.

R 325.51153
Source: 1993 AACS.

R 325.51154
Source: 1993 AACS.

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R 325.51155
Source: 1993 AACS.

R 325.51156
Source: 1993 AACS.

R 325.51157
Source: 1988 AACS.

R 325.51158
Source: 1988 AACS.

R 325.51159
Source: 1993 AACS.

R 325.51160
Source: 1988 AACS.

R 325.51161
Source: 1993 AACS.

R 325.51162
Source: 1998-2000 AACS.

R 325.51163
Source: 1998-2000 AACS.

R 325.51164
Source: 1988 AACS.

R 325.51165
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R 325.51166
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R 325.51167
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R 325.51168
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R 325.51169
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R 325.51170
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R 325.51171
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R 325.51172
Source: 1993 AACS.

R 325.51173
Source: 1993 AACS.

R 325.51174
Source: 1993 AACS.

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R 325.51175
Source: 1988 AACS.

R 325.51176
Source: 1988 AACS.

R 325.51177
Source: 1998-2000 AACS.

ASBESTOS STANDARDS FOR CONSTRUCTION

R 325.51301
Source: 1997 AACS.

R 325.51302
Source: 1998-2000 AACS.

ASBESTOS STANDARDS FOR GENERAL INDUSTRY

R 325.51311
Source: 1997 AACS.

R 325.51312
Source: 1998-2000 AACS.

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DIRECTOR'S OFFICE

OCCUPATIONAL HEALTH STANDARDS--VINYL CHLORIDE

R 325.51401
Source: 1998-2000 AACS.

R 325.51402
Source: 1998-2000 AACS.

R 325.51403
Source: 1998-2000 AACS.

R 325.51404
Source: 1998-2000 AACS.

R 325.51405
Source: 1998-2000 AACS.

R 325.51406
Source: 1998-2000 AACS.

R 325.51407
Source: 1998-2000 AACS.

R 325.51408
Source: 1998-2000 AACS.

R 325.51409

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Source: 1998-2000 AACS.

R 325.51410

Source: 1998-2000 AACS.

R 325.51411

Source: 1998-2000 AACS.

R 325.51412

Source: 1998-2000 AACS.

R 325.51413

Source: 1998-2000 AACS.

R 325.51414

Source: 1998-2000 AACS.

FORMALDEHYDE

R 325.51451

Source: 1990 AACS.

R 325.51452

Source: 1998-2000 AACS.

R 325.51453

Source: 1993 AACS.

R 325.51454

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R 325.51455

Source: 1993 AACS.

R 325.51456

Source: 1990 AACS.

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R 325.51458

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R 325.51459

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R 325.51460

Source: 1998-2000 AACS.

R 325.51461

Source: 1998-2000 AACS.

R 325.51462

Source: 1998-2000 AACS.

R 325.51463

Source: 1990 AACS.

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R 325.51464
Source: 1990 AACS.

R 325.51465
Source: 1990 AACS.

R 325.51466
Source: 1990 AACS.

R 325.51467
Source: 1993 AACS.

R 325.51468
Source: 1990 AACS.

R 325.51469
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R 325.51470
Source: 1998-2000 AACS.

R 325.51471
Source: 1993 AACS.

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R 325.51473
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R 325.51474
Source: 1990 AACS.

R 325.51475
Source: 1993 AACS.

R 325.51476
Source: 1998-2000 AACS.

R 325.51477
Source: 1998-2000 AACS.

ACRYLONITRILE (AN)

R 325.51501
Source: 1980 AACS.

R 325.51502
Source: 1998-2000 AACS.

R 325.51503
Source: 1980 AACS.

R 325.51504
Source: 1980 AACS.

R 325.51505
Source: 1980 AACS.

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- R 325.51506**
Source: 1980 AACS.
- R 325.51507**
Source: 1980 AACS.
- R 325.51508**
Source: 1980 AACS.
- R 325.51509**
Source: 1998-2000 AACS.
- R 325.51510**
Source: 1980 AACS.
- R 325.51511**
Source: 1993 AACS.
- R 325.51512**
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- R 325.51513**
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- R 325.51514**
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- R 325.51515**
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- R 325.51516**
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- R 325.51517**
Source: 1998-2000 AACS.
- R 325.51518**
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- R 325.51519**
Source: 1998-2000 AACS.
- R 325.51520**
Source: 1980 AACS.
- R 325.51521**
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- R 325.51522**
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- R 325.51523**
Source: 1980 AACS.
- R 325.51524**
Source: 1993 AACS.
- R 325.51525**
Source: 1993 AACS.

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R 325.51526
Source: 1980 AACS.

R 325.51527
Source: 1998-2000 AACS.

INORGANIC ARSENIC (AS)

R 325.51601
Source: 1993 AACS.

R 325.51602
Source: 1998-2000 AACS.

R 325.51603
Source: 1980 AACS.

R 325.51604
Source: 1980 AACS.

R 325.51605
Source: 1980 AACS.

R 325.51606
Source: 1993 AACS.

R 325.51607
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R 325.51608
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R 325.51609
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R 325.51610
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R 325.51611
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R 325.51612
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R 325.51613
Source: 1998-2000 AACS.

R 325.51614
Source: 1998-2000 AACS.

R 325.51615
Source: 1980 AACS.

R 325.51616
Source: 1980 AACS.

R 325.51617
Source: 1980 AACS.

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R 325.51618
Source: 1998-2000 AACS.

R 325.51619
Source: 1998-2000 AACS.

R 325.51620
Source: 1980 AACS.

R 325.51621
Source: 1980 AACS.

R 325.51622
Source: 1993 AACS.

R 325.51623
Source: 1980 AACS.

R 325.51624
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R 325.51625
Source: 1993 AACS.

R 325.51626
Source: 1980 AACS.

R 325.51627
Source: 1980 AACS.

R 325.51628
Source: 1998-2000 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

OCCUPATIONAL HEALTH STANDARDS COMMISSION

METHYLENE CHLORIDE

R 325.51651
Source: 1998-2000 AACS.

R 325.51652
Source: 1998-2000 AACS.

CADMIUM

R 325.51851
Source: 1998-2000 AACS.

R 325.51852
Source: 1998-2000 AACS.

R 325.51853
Source: 1993 AACS.

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- R 325.51854**
Source: 1993 AACS.
- R 325.51855**
Source: 1998-2000 AACS.
- R 325.51856**
Source: 1998-2000 AACS.
- R 325.51857**
Source: 1993 AACS.
- R 325.51858**
Source: 1998-2000 AACS.
- R 325.51859**
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- R 325.51860**
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- R 325.51861**
Source: 1993 AACS.
- R 325.51862**
Source: 1998-2000 AACS.
- R 325.51863**
Source: 1998-2000 AACS.
- R 325.51864**
Source: 1993 AACS.
- R 325.51865**
Source: 1998-2000 AACS.
- R 325.51866**
Source: 1993 AACS.
- R 325.51867**
Source: 1993 AACS.
- R 325.51868**
Source: 1998-2000 AACS.
- R 325.51869**
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- R 325.51870**
Source: 1998-2000 AACS.
- R 325.51871**
Source: 1993 AACS.
- R 325.51872**
Source: 1998-2000 AACS.
- R 325.51873**
Source: 1993 AACS.

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- R 325.51874**
Source: 1993 AACS.
- R 325.51875**
Source: 1998-2000 AACS.
- R 325.51876**
Source: 1993 AACS.
- R 325.51877**
Source: 1993 AACS.
- R 325.51878**
Source: 1993 AACS.
- R 325.51879**
Source: 1998-2000 AACS.
- R 325.51880**
Source: 1998-2000 AACS.
- R 325.51881**
Source: 1993 AACS.
- R 325.51882**
Source: 1993 AACS.
- R 325.51883**
Source: 1998-2000 AACS.
- R 325.51884**
Source: 1993 AACS.
- R 325.51885**
Source: 1998-2000 AACS.
- R 325.51886**
Source: 1998-2000 AACS.

LEAD

- R 325.51901**
Source: 1998-2000 AACS.
- R 325.51902**
Source: 1998-2000 AACS.
- R 325.51903**
Source: 1998-2000 AACS.
- R 325.51904**
Source: 1998-2000 AACS.
- R 325.51905**
Source: 1998-2000 AACS.
- R 325.51906**
Source: 1998-2000 AACS.

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- R 325.51907**
Source: 1981 AACS.
- R 325.51908**
Source: 1998-2000 AACS.
- R 325.51909**
Source: 1981 AACS.
- R 325.51910**
Source: 1981 AACS.
- R 325.51911**
Source: 1981 AACS.
- R 325.51912**
Source: 1981 AACS.
- R 325.51913**
Source: 1981 AACS.
- R 325.51914**
Source: 1998-2000 AACS.
- R 325.51915**
Source: 1984 AACS.
- R 325.51916**
Source: 1998-2000 AACS.
- R 325.51916a**
Source: 1984 AACS.
- R 325.51916b**
Source: 1984 AACS.
- R 325.51917**
Source: 1998-2000 AACS.
- R 325.51918**
Source: 1998-2000 AACS.
- R 325.51919**
Source: 1998-2000 AACS.
- R 325.51920**
Source: 1998-2000 AACS.
- R 325.51921**
Source: 1998-2000 AACS.
- R 325.51922**
Source: 1981 AACS.
- R 325.51923**
Source: 1981 AACS.
- R 325.51924**
Source: 1988 AACS.

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R 325.51925
Source: 1981 AACS.

R 325.51926
Source: 1981 AACS.

R 325.51927
Source: 1981 AACS.

R 325.51928
Source: 1981 AACS.

R 325.51929
Source: 1998-2000 AACS.

R 325.51930
Source: 1998-2000 AACS.

R 325.51931
Source: 1988 AACS.

R 325.51931a
Source: 1998-2000 AACS.

R 325.51932
Source: 1998-2000 AACS.

R 325.51933
Source: 1988 AACS.

R 325.51934
Source: 1998-2000 AACS.

R 325.51935
Source: 1981 AACS.

R 325.51936
Source: 1981 AACS.

R 325.51937
Source: 1981 AACS.

R 325.51938
Source: 1981 AACS.

R 325.51938a
Source: 1988 AACS.

R 325.51939
Source: 1981 AACS.

R 325.51940
Source: 1981 AACS.

R 325.51941
Source: 1984 AACS.

R 325.51942
Source: 1981 AACS.

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R 325.51943
Source: 1998-2000 AACS.

R 325.51944
Source: 1981 AACS.

R 325.51945
Source: 1981 AACS.

R 325.51946
Source: 1981 AACS.

R 325.51947
Source: 1981 AACS.

R 325.51948
Source: 1981 AACS.

R 325.51949
Source: 1998-2000 AACS.

R 325.51950
Source: 1981 AACS.

R 325.51950a
Source: 1984 AACS.

R 325.51950b
Source: 1984 AACS.

R 325.51951
Source: 1981 AACS.

R 325.51952
Source: 1981 AACS.

R 325.51953
Source: 1981 AACS.

R 325.51954
Source: 1981 AACS.

R 325.51955
Source: 1981 AACS.

R 325.51956
Source: 1981 AACS.

R 325.51957
Source: 1981 AACS.

R 325.51958
Source: 1998-2000 AACS.

LEAD EXPOSURE IN CONSTRUCTION

R 325.51991

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Source: 1993 AACS.

R 325.51992

Source: 1998-2000 AACS.

HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE

R 325.52101

Source: 1991 AACS.

R 325.52102

Source: 1998-2000 AACS.

R 325.52103

Source: 1998-2000 AACS.

R 325.52104

Source: 1991 AACS.

R 325.52105

Source: 1991 AACS.

R 325.52106

Source: 1991 AACS.

R 325.52107

Source: 1991 AACS.

R 325.52108

Source: 1991 AACS.

R 325.52109

Source: 1991 AACS.

R 325.52110

Source: 1991 AACS.

R 325.52111

Source: 1991 AACS.

R 325.52112

Source: 1991 AACS.

R 325.52113

Source: 1998-2000 AACS.

R 325.52114

Source: 1998-2000 AACS.

R 325.52115

Source: 1991 AACS.

R 325.52116

Source: 1991 AACS.

R 325.52117

Source: 1991 AACS.

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R 325.52118
Source: 1998-2000 AACS.

R 325.52119
Source: 1991 AACS.

R 325.52120
Source: 1991 AACS.

R 325.52121
Source: 1991 AACS.

R 325.52122
Source: 1991 AACS.

R 325.52123
Source: 1991 AACS.

R 325.52124
Source: 1991 AACS.

R 325.52125
Source: 1998-2000 AACS.

R 325.52126
Source: 1991 AACS.

R 325.52127
Source: 1991 AACS.

R 325.52128
Source: 1991 AACS.

R 325.52129
Source: 1998-2000 AACS.

R 325.52130
Source: 1998-2000 AACS.

R 325.52131
Source: 1998-2000 AACS.

R 325.52132
Source: 1991 AACS.

R 325.52133
Source: 1991 AACS.

R 325.52134
Source: 1991 AACS.

R 325.52135
Source: 1998-2000 AACS.

R 325.52136
Source: 1991 AACS.

R 325.52137

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Source: 1998-2000 AACS.

OCCUPATIONAL HEALTH STANDARDS

R 325.52201

Source: 2001 AACS.

R 325.52401

Source: 2001 AACS.

R 325.52701

Source: 2001 AACS.

PERSONAL PROTECTIVE EQUIPMENT

R 325.60001

Source: 1998-2000 AACS.

R 325.60002

Source: 1995 AACS.

R 325.60003

Source: 1995 AACS.

R 325.60004

Source: 1995 AACS.

R 325.60005

Source: 1998-2000 AACS.

R 325.60006

Source: 1995 AACS.

R 325.60007

Source: 1998-2000 AACS.

R 325.60008

Source: 1998-2000 AACS.

R 325.60009

Source: 1998-2000 AACS.

R 325.60010

Source: 1995 AACS.

R 325.60011

Source: 1995 AACS.

R 325.60012

Source: 1995 AACS.

R 325.60013

Source: 1998-2000 AACS.

USE OF RESPIRATORS IN DANGEROUS ATMOSPHERES

R 325.60022

Source: 1998-2000 AACS.

RESPIRATORY PROTECTION

R 325.60051
Source: 1998-2000 AACS.

R 325.60052
Source: 1998-2000 AACS.

OCCUPATIONAL NOISE EXPOSURE

R 325.60101
Source: 1986 AACS.

R 325.60102
Source: 1986 AACS.

R 325.60103
Source: 1986 AACS.

R 325.60104
Source: 1986 AACS.

R 325.60105
Source: 1986 AACS.

R 325.60106
Source: 1986 AACS.

R 325.60107
Source: 1986 AACS.

R 325.60108
Source: 1986 AACS.

R 325.60109
Source: 1986 AACS.

R 325.60110
Source: 1986 AACS.

R 325.60111
Source: 1986 AACS.

R 325.60112
Source: 1986 AACS.

R 325.60113
Source: 1986 AACS.

R 325.60114
Source: 1986 AACS.

R 325.60115
Source: 1993 AACS.

R 325.60116
Source: 1986 AACS.

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R 325.60117
Source: 1986 AACS.

R 325.60118
Source: 1986 AACS.

R 325.60119
Source: 1993 AACS.

R 325.60120
Source: 1993 AACS.

R 325.60121
Source: 1993 AACS.

R 325.60122
Source: 1993 AACS.

R 325.60123
Source: 1986 AACS.

R 325.60124
Source: 1986 AACS.

R 325.60125
Source: 1993 AACS.

R 325.60126
Source: 1986 AACS.

R 325.60127
Source: 1993 AACS.

R 325.60128
Source: 1993 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

DIRECTOR'S OFFICE

OCCUPATIONAL HEALTH STANDARDS--NOISE EXPOSURE FOR CONSTRUCTION

R 325.60131
Source: 1998-2000 AACS.

AIR CONTAMINANTS FOR CONSTRUCTION

R 325.60151 Construction air contaminants.

Rule 1. (1) An employer shall ensure that employee exposures to inhalation, ingestion, skin absorption, or contact with any material or substance at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants for 1970" of the American Conference of Governmental Industrial Hygienists, as listed in R 325.60154 to R 325.60161, are avoided.

(2) To achieve compliance with subrule (1) of this rule, an employer shall ensure that administrative or engineering controls are implemented whenever feasible. If administrative or engineering controls are not feasible to achieve full compliance, then protective equipment or other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed in this rule. Any equipment and technical measures used for this purpose shall first be approved for each

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particular use by a competent industrial hygienist or other technically qualified person. Respirators shall be used in a manner that is in compliance with R 325.60051 et seq., Part 451. respiratory protection.

(3) R 325.51401 et seq., Part 302. vinyl chloride, of the MIOSHA Occupational Health Standards for General Industry applies to the

exposure of every employee to vinyl chloride in every employment and place of employment covered by these rules in place of any different standard on exposure to vinyl chloride that would otherwise be applicable by virtue of subrule (1) of this rule.

(4) These rules replace O.H. rule 6201.

(5) The "Threshold Limit Values (TLV) of the American Conference of Governmental Industrial Hygienists (A.C.G.I.H.) for 1970" appear in R 325.60153 to R 325.60161. The Threshold Limit Values identified in these administrative rules as Maximum Allowable Concentrations (MAC) are specified in the rules that follow.

History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60152 Definitions pertaining to contaminants.

Rule 2. As used in these rules:

(a) "Maximum allowable concentration" or "MAC" means the threshold limit value or the time-weighted average 8-hour airborne concentration of a contaminant to which a person may be safely exposed.

(b) "Mg/m³" means milligrams of particulate per cubic meter of air.

(c) "Mppcf" means millions of particulates per cubic foot of air based on impinger samples counted by light field microscopic techniques.

(d) "Non-respirable atmosphere" means an atmosphere which contains insufficient oxygen, or an elevated level of contaminants which may render a person incapable of self-rescue.

(e) "Ppm" means parts of vapor or gas per million parts of air by volume at 25 degrees Celsius and 760 millimeters of mercury pressure.

(f) "Source" means a process or equipment that releases a contaminant into the air in concentrations exceeding the MAC.

History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60153 Contaminants; exposures; MAC.

Rule 3. (1) An employer shall not allow an employee to be exposed to a contaminant at concentrations in excess of the MAC as listed in R 325.60154 to R 325.60161.

(2) An employer shall not allow an employee to be exposed to a contaminant or combination of contaminants in concentrations that are hazardous or injurious to the person's health.

History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60154 Maximum allowable concentrations.

Rule 4. (1) Maximum allowable concentrations of air contaminants based on a repeated 8-hour work day exposure are listed in tables 1 to 7 in R 325.60155 to R 325.60161.

(2) A substance in tables 1 to 6 that is preceded by the letter A, C, or S is an especially hazardous contaminant and all the following precautions shall be taken:

(a) If the substance is preceded by the letter "A", then an employer shall ensure that an employee or any part of an employee's anatomy is not exposed to, or allowed to come in contact with, the substance by means of any respiratory, oral, or skin route.

(b) If the substance is preceded by the letter "C", then its MAC means the highest concentration at which an employer may allow a person to be exposed at any time. This concentration is commonly referred to as a "ceiling."

(c) If the substance is preceded by the letter "S", then an employer shall ensure that precautions are taken to prevent skin absorption.

History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60155 Maximum allowable concentrations for substances; A and B.

Rule 5. Table 1. Substances A and B

Substance	MAC	
	ppm	mg/m ³
Abate	---	15
Acetaldehyde	200	360
Acetic acid	10	25
Acetic anhydride	5	20
Acetone	1,000	2,400

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	Acetonitrile	40	70
	Acetylene	Inert gas	
	Acetylene dichloride, see 1,2-Dichloroethylene		
	Acetylene tetrabromide	1	14
	Acrolein	0.1	0.25
S	Acrylamide	---	0.3
S	Acrylonitrile (see R 325.51501 et seq.*)		
S	Aldrin	---	0.25
S	Allyl alcohol	2	5
	Allyl chloride	1	3
C	Allyl glycidyl ether (AGE)	10	45
	Allyl propyl disulfide	2	12
	Alundum, (Al ₂ O ₃)	Inert dust	
	2-Aminoethanol, see Ethanolamine		
	2-Aminopyridine	0.5	2
	Ammonia	50	35
	Ammonium sulfamate (amate)	---	15
	n-Amyl acetate	100	525
	sec-Amyl acetate	125	650
S	Aniline	5	19
S	Anisidine (o,p-isomers)	---	0.5
	Antimony & compounds (as Sb)	---	0.5
	ANTU (alpha naphthyl thiourea)	---	0.3
	Argon	Inert gas	
	Arsenic, inorganic compounds (see R 325.51601 et seq.*)		
	Arsenic, organic compounds (as As)	---	0.5
	Arsine	0.05	0.2
S	Azinphos-methyl	---	0.2
	Barium (soluble compounds)	---	0.5
S,C	Benzene (benzol) (see R 325.77101 et seq.*)		
A,S	Benzidine	---	---
	P-Benzoquinone, see Quinone		
	Benzoyl peroxide	---	5
	Benzyl chloride	1	5
	Beryllium	---	0.002
	Biphenyl, see Diphenyl		
	Bisphenol A, see Diglycidyl ether		
	Boron oxide	---	15
	Boron tribromide	1	10
C	Boron trifluoride	1	3
	Bromine	0.1	0.7
	Bromine pentafluoride	0.1	0.7
S	Bromoform	0.5	5
	Butadiene (1,3-butadiene) (see R 325.50091 et seq.*)		
	Butanethiol, see Butyl mercaptan		
	2-Butanone	200	590
S	2-Butoxy ethanol (butyl cellosolve)	50	240
	Butyl acetate (n-butyl acetate)	150	710
	sec-Butyl acetate	200	950
	tert-Butyl acetate	200	950
	Butyl alcohol	100	300
	sec-Butyl alcohol	150	450
	tert-Butyl alcohol	100	300
S,C	Butylamine	5	15
S,C	tert-Butyl chromate (as CrO ₃)	---	0.1
	n-Butyl glycidyl ether (BGE)	50	270

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Butyl mercaptan	0.5	1.5
p-tert-Butyltoluene	10	60

A See R 325.60154(2).

C See R 325.60154(2).

S See R 325.60154(2).

* Caution--these rules contain extensive requirements for exposure to these substances.

History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60156 Maximum allowable concentrations for substances; C and D.

Rule 6. Table 2. Substances C and D

Substance		ppm	MAC mg/m ³
	<i>Cadmium (metal dust and soluble salts)</i>	<i>(see R 325.51851 et seq. *)</i>	
C	Cadmium oxide fume (as Cd) (see R 325.51851 et seq. *)		
	Calcium arsenate	---	1
	Calcium carbonate	Inert dust	
	Calcium oxide	---	5
	Camphor (synthetic)	2	---
	Carbaryl (Sevin®)	---	5
	Carbon black	---	3.5
	Carbon dioxide	5,000	9,000
S	Carbon disulfide	20	60
	Carbon monoxide	50	55
S,C	Carbon tetrachloride	10	65
	Cellulose (paper fiber)	Inert dust	
S	Chlordane	---	0.5
S	Chlorinated camphene	---	0.5
	Chlorinated diphenyl oxide	---	0.5
	Chlorine	1	3
	Chlorine dioxide	0.1	0.3
C	Chlorine trifluoride	0.1	0.4
C	Chloroacetaldehyde	1	3
	alpha-Chloroacetophenone (phenacylchloride)	0.05	0.3
	Chlorobenzene (monochlorobenzene)	75	350
	o-Chlorobenzylidene malononitrile (OCBM)	0.05	0.4
	Chlorobromomethane	200	1,050
	2-Chloro-1,3-butadiene, see Chloroprene		
S	Chlorodiphenyl (42% Chlorine)	---	1
S	Chlorodiphenyl (54% Chlorine)	---	0.5
	1-Chloro-2,3-epoxypropane, see Epichlorohydrin		
	2-Chloroethanol, see Ethylene chlorohydrin		
	Chloroethylene, see Vinyl chloride		
C	Chloroform (trichloromethane)	50	240
	1-Chloro-1-nitropropane	20	100
	Chloropicrin	0.1	0.7
S	Chloroprene (2-chloro-1,3-butadiene)	25	90
	Chromic acid and chromates (as CrO ₃)	---	0.1
	Chromium, sol. chromic & chromous salts (as Cr)	---	0.5
	Metal & insol. salts	---	1
	Coal tar pitch volatiles (benzene soluble fraction: anthracene, BaP, phenanthrene, acridine, chrysene, pyrene)	---	0.2
	Cobalt, metal fume & dust	---	0.1
	Coke oven emissions (see R 325.50101 et seq. *)		
	Copper fume	---	0.1
	Dusts and mists	---	1
	Corundum (Al ₂ O ₃)	Inert dust	

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	Cotton dust (raw)	---	1
	Crag® herbicide	---	15
S	Cresol (all isomers)	5	22
	Crotonaldehyde	2	6
S	Cumene	50	245
S	Cyanide (as CN)	---	5
	Cyanogen	10	---
	Cyclohexane	300	1,050
	Cyclohexanol	50	200
	Cyclohexanone	50	200
	Cyclohexene	300	1,015
	Cyclopentadiene	75	200
	2,4-D	---	10
S	DDT (Dichlorodiphenyltrichloroethane)	---	1
	DDVP, see Dichlorvos		
S	Decaborane	0.05	0.3
S	Demeton®	---	0.1
	Diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	50	240
	1,2-Diainoethane, see Ethylenediamine		
	Diazomethane	0.2	0.4
	Diborane	0.1	0.1
S,C	2-Dibromoethane (ethylene dibromide)	25	190
	Dibutyl phosphate	1	5
	Dibutyl phthalate	---	5
C	Dichloroacetylene	0.1	0.4
C	o-Dichlorobenzene	50	300
	p-Dichlorobenzene	75	450
	Dichlorodifluoromethane	1,000	4,950
	1,3-Dichloro-5,5-dimethyl hydantoin	---	0.2
	1,1-Dichloroethane	100	400
	1,2-Dichloroethane	50	200
	1,2-Dichloroethylene	200	790
S,C	Dichloroethyl ether	15	90
	Dichloromethane, see Methylene chloride		
	Dichloromonofluoromethane	1,000	4,200
C	1,1-Dichloro-1-nitroethane	10	60
	1,2-Dichloropropane, see Propylene dichloride		
	Dichlorotetrafluoroethane	1,000	7,000
S	Dichlorvos (DDVP)	---	1
S	Dieldrin	---	0.25
	Diethyl	25	75
S	Diethylamino, ethanol	10	50
S,C	Diethylene triamine	10	42
	Diethyl ether, see Ethyl ether		
	Difluorodibromomethane	100	860
C	Diglycidyl ether (DGE)	0.5	2.8
	Dihydroxybenzene, see Hydroquinone		
	Diisobutyl ketone	50	290
S	Diisopropylamine	5	20
	Dimethoxymethane, see Methylal		
S	Dimethyl acetamide	10	35
	Dimethylamine	10	18
	Dimethylaminobenzene, see Xylidene		
S	Dimethylaniline (N-dimethylaniline)	5	25
	Dimethylbenzene, see Xylene		
	Dimethyl-1,2-dibromo-2,2-dichloroethyl phosphate	---	3

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	(Dibrom®)		
S	Dimethylformamide	10	30
	2,6-Dimethylheptanone, see Diisobutyl ketone		
S	1,1-Dimethylhydrazine	0.5	1
	Dimethylphthalate	---	5
S	Dimethylsulfate	1	5
S	Dinitrobenzene (all isomers)	---	1
S	Dinitro-o-cresol	---	0.2
S	Dinitrotoluene	---	1.5
S	Dioxane (diethylene dioxide)	100	360
	Diphenyl	0.2	1
	Diphenyl amine	---	10
	Diphenylmethane diisocyanate, see Methylene bisphenyl isocyanate (MDI)		
S	Dipropylene glycol methyl ether	100	600
	Di-sec-octyl phthalate (di-2-ethylhexylphthalate)	---	5
	A See R 325.60154(2).		
	C See R 325.60154(2).		
	S See R 325.60154(2).		

* Caution--these rules contain extensive requirements for exposure to these substances.
History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60157 Maximum allowable concentrations for substances; E to H.

Rule 7. Table 3. Substances E to H

Substance	MAC	
	ppm	mg/m ³
Emery	Inert dust	
S Endosulfan (Thiodan®)	---	0.1
S Endrin	---	0.1
S Epichlorohydrin	5	19
S EPN	---	0.5
1,2-Epoxypropane, see Propylene oxide		
2,3-Epoxy-1-propanol, see Glycidol		
Ethane	Inert gas	
Ethanethiol, see Ethyl mercaptan		
Ethanolamine	3	6
S 2-Ethoxyethanol	200	740
S 2-Ethoxyethylacetate (cellosolve acetate)	100	540
	400	1,400
S Ethyl acetate	25	100
Ethyl acrylate	1,000	1,900
Ethyl alcohol (ethanol)	10	18
Ethylamine	25	130
Ethyl sec-amyl ketone (5-methyl-3-heptanone)	100	435
Ethyl benzene	200	890
Ethyl bromide	50	230
Ethyl butyl ketone (3-heptanone)	1,000	2,600
Ethyl chloride	400	1,200
Ethyl ether	100	300
Ethyl formate	0.5	1
Ethyl mercaptan	100	850
Ethyl silicate		
Ethylene	Inert gas	
S Ethylene chlorohydrin	5	16
Ethylenediamine	10	25
Ethylene dibromide, see 1,2-Dibromoethane		
Ethylene dichloride, see 1,2-Dichloroethane		

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S,C	Ethylene glycol dinitrate and/or Nitroglycerin	0.2	
	Ethylene glycol monomethyl ether acetate, see Methyl cellosolve acetate		
S	Ethyleneimine	0.5	1
	Ethylene oxide (see R 325.51151 et seq.)*		
	Ethylidene chloride, see 1,1-Dichloroethane		
S	N-Ethylmorpholine	20	94
	Ferbam	---	15
	Ferrovandium dust	---	1
	Fibrous glass	Inert dust	
	Fluoride (as F)	---	2.5
	Fluorine	0.1	0.2
	Fluorotrichloromethane	1,000	5,600
C	Formaldehyde (see R 325.51451 et seq.)*		
	Formic acid	5	9
S	Furfural	5	20
	Furfuryl alcohol	50	200
	Gasoline (limits will be based on aromatic hydrocarbons in mixture)		
	Glycerine mist	Inert mist	
	Glycidol (2,3-epoxy-1-propanol)	50	150
	Glycol monoethyl ether, see 2-Ethoxyethanol		
	Graphite (synthetic)	Inert dust	
	Guthion®, see Azinphos-methyl		
	Gypsum	Inert dust	
	Hafnium	---	0.5
	Helium	Inert gas	
S	Heptachlor	---	0.5
	Heptane (n-heptane)	500	2,000
S	Hexachloroethane	1	10
S	Hexachloronaphthalene	---	0.2
	Hexane (n-hexane)	500	1,800
	2-Hexanone	100	410
	Hexone (methyl isobutyl ketone)	100	410
	sec-Rexyl acetate	50	300
S	Hydrazine	1	1.3
	Hydrogen	Inert gas	
	Hydrogen bromide	3	10
C	Hydrogen chloride	5	7
S	Hydrogen cyanide	10	11
	Hydrogen fluoride	3	2
	Hydrogen peroxide	1	1.4
	Hydrogen selenide	0.05	0.2
	Hydrogen sulfide	10	15
	Hydroquinone	---	2

A See R 325.60154(2).

C See R 325.60154(2).

S See R 325.60154(2).

* Caution--these rules contain extensive requirements for exposure to these substances.

History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60158 Maximum allowable concentrations for substances; I to M.

Rule 8. Table 4. Substances I to M

Substance	ppm	MAC mg/m ³
<i>Indene</i>	10	45
Indium and compounds (as In)	---	0.1

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C	Iodine	0.1	1
	Iron oxide fume	---	10
	Iron salts, soluble (as Fe)	---	1
	Isoamyl acetate	100	525
	Isoamyl alcohol	100	360
	Isobutyl acetate	150	700
	Isobutyl alcohol	100	300
	Isophorone	25	140
	Isopropyl acetate	250	950
	Isopropyl alcohol	400	980
	Isopropylamine	5	12
	Isopropyl ether	500	2,100
	Isopropyl glycidyl ether (IGE)	50	240
	Kaolin	Inert dust	
	Ketene	0.5	0.9
	Lead and lead compounds (see R 325.51991 et seq. *)		
	Limestone	Inert dust	
S	Lindane	---	0.5
	Lithium hydride	---	0.025
	L.P.G. (liquified petroleum gas)	1,000	1,800
	Magnesite	Inert dust	
	Magnesium oxide fume	15	
S	Malathion	---	15
	Maleic anhydride	0.25	1
C	Manganese and compounds (as Mn)	---	5
	Marble	Inert dust	
S	Mercury	---	0.1
S	Mercury (organic compounds)	---	0.01
	Mesityl oxide	25	100
	Methane	Inert gas	
	Methanethiol, see Methyl mercaptan		
	Methoxychlor	---	15
	2-Methoxyethanol, see Methyl cellosolve		
	Methyl acetate	200	610
	Methyl acetylene (propyne)	1,000	1,650
	Methyl acetylene-propadiene mixture (MAPP)	1,000	1,800
S	Methyl acrylate	10	35
	Methylal (dimethoxymethane)	1,000	3,100
	Methyl alcohol (methanol)	200	260
	Methylamine	10	12
	Methyl amyl alcohol, see Methyl isobutyl carbinol		
	Methyl (n-amyl) ketone (2-heptanone)	100	465
S,C	Methyl bromide	20	80
	Methyl butyl ketone, see 2-Hexanone		
S	Methyl cellosolve	25	80
S	Methyl cellosolve acetate	25	120
C	Methyl chloride	100	210
	Methyl chloroform	350	1,900
	Methylcyclohexane	500	2,000
	<i>Methylcyclohexanol</i>	100	470
S	o-Methylcyclohexanone	100	460
	Methylenedianiline (MDA) (see R 325.51651 et seq. *)		
	Methyl ethyl ketone (MEK), see 2-Butanone		
	Methyl formate	100	250
S	Methyl iodide	5	28
	Methyl isoamyl ketone	100	475

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S	Methyl isobutyl carbinol	25	100
	Methyl isobutyl ketone, see Hexone		
S	Methyl isocyanate	0.02	0.05
	Methyl mercaptan	0.5	1
	Methyl methacrylate	100	410
	Methyl propyl ketone, see 2-Pentanone		
C	Methyl silicate	5	30
C	alpha-Methyl styrene	100	480
C	Methylene bisphenyl isocyanate (MDI)	0.02	0.2
	Methylene chloride (dichloromethane) (see R 325.51651 et seq.*)		
	Molybdenum (soluble compounds)	---	5
	(insoluble compounds)	---	15
S	Monomethyl aniline	2	9
S,C	Mouomethyl hydrazine	0.2	0.35
S	Morpholine	20	70

A See R 325.60154(2).

C See R 325.60154(2).

S See R 325.60154(2).

* Caution--these rules contain extensive requirements for exposure to these substances.

History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60159 Maximum allowable concentrations for substances; N to P.

Rule 9. Table 5. Substances N to P

Substance	MAC	
	ppm	mg/m ³
Naphtha (coal tar)	100	400
Naphtha (petroleum)(MAC will be based on aromatic hydrocarbons in mixture)		
Naphthalene	10	50
A beta-Naphthylamine	---	
Neon	Inert gas	
Nickel carbonyl	0.001	0.007
Nickel, metal and soluble compounds (as Ni)	---	1
S Nicotine	---	0.5
Nitric acid	2	5
Nitric oxide	25	30
S p-Nitroaniline	1	6
S Nitrobenzene	1	5
S p-Nitrochlorobenzene	---	1
Nitroethane	100	310
Nitrogen	Inert gas	
Nitrogen dioxide	5	9
Nitrogen trifluoride	10	29
S Nitroglycerin	0.2	2
Nitromethane	100	250
1-Nitropropane	25	90
2-Nitropropane	25	90
S,A N-Nitrosodimethylamine (dimethylnitrosomine)	---	
S Nitrotoluene	5	30
Nitrotrichloromethane, see Chloropicrin		
Nitrous oxide	Inert gas	
S Octachloronaphthalene	---	0.1
Octane	400	1,900
Oil mist, particulate	---	5
Oil mist, vapor (MAC will be based on aromatic hydrocarbons in mixture)		

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	Osmium tetroxide	---	0.002
	Oxalic acid	---	1
	Oxygen difluoride	0.05	0.1
	Ozone	0.1	0.2
S	Paraquat	---	0.5
S	Parathion	---	0.1
	Pentaborane	0.005	0.01
S	Pentachloronaphthalene	---	0.5
S	Pentachlorophenol	---	0.5
	Pentaerythritol Inert particulate		
	Pentane	500	1,500
	2-Pentanone	200	700
	Perchloroethylene	100	670
	Perchloromethyl mercaptan	0.1	0.8
	Perchloryl fluoride	3	13.5
	Petroleum distillates (naphtha)(MAC will be based on aromatic hydrocarbons in mixture)		
S	Phenol	5	19
S	p-Phenylene diamine	---	0.1
	Phenyl ether (vapor)	1	7
	Phenyl ether-biphenyl mixture (vapor)	1	7
	Phenylethylene, see Styrene		
	Phenyl glycidyl ether (PGE)	10	60
S	Phenylhydrazine	5	22
S	Phosdrin (Mevinphos®)	---	0.1
	Phosgene (carbonyl chloride)	0.1	0.4
	Phosphine	0.3	0.4
	Phosphoric acid	---	1
	Phosphorus (yellow)	---	0.1
	Phosphorus pentachloride	---	1
	Phosphorus pentasulfide	---	1
	Phosphorus trichloride	0.5	3
	Phthalic anhydride	2	12
S	Picric acid	---	0.1
	Pival® (2-pivalyl-1,3-indandione)	---	0.1
	Plaster of Paris	Inert dust	
	Platinim, soluble salts (as Pt)	---	0.002
	Polytetrafluoroethylene decomposition products, see Teflon® decomposition products		
	Propane	Inert gas	
S	Propargyl alcohol	1	---
A	beta-Propiolactone	---	
	n-Propyl acetate	200	840
	Propyl alcohol	200	500
	n-Propyl nitrate	25	110
	Propylene bichloride	75	350
S	Propylene imine	2	5
	Propylene oxide	100	240
	Propyne, see Methyl acetylene		
	Pyrethrum	---	5
	Pyridine	5	15

A See R 325.60154(2).
C See R 325.60154(2).
S See R 325.60154(2).

History: 2002 MR 1, Eff. Jan. 23, 2002.

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R 325.60160 Maximum allowable concentrations for substances; Q to Z.

Rule 10. Table 6. Substances Q to Z

		MAC	
Substance	ppm	mg/m ³	
	0.1	0.4	
<i>S</i> Quinone	---	1.5	
<i>S</i> RDX	---	0.1	
Rhodium, metal fume, dusts, and insoluble compounds (as Rh)	---	0.001	
Rhodium, soluble compounds (as Rh)	---	10	
Ronnel	---	5	
Rotenone (commercial)	---	Inert dust	
Rouge	---	0.2	
Selenium compounds (as Se)	---	0.4	
Selenium hexafluoride	0.05	Inert dust	
Silicon carbide	---	0.01	
Silver, metal and soluble compounds	---	0.05	
<i>S</i> Sodium fluoroacetate (1080)	---	2	
Sodium hydroxide	---	Inert dust	
Starch	---	0.5	
Stibine	0.1	1,150	
Stoddard solvent	200	0.15	
Strychnine	---	420	
<i>C</i> Styrene monomer (phenylethylene)	100	Inert dust	
Sucrose	---	13	
Sulfur dioxide	5	6,000	
Sulfur hexafluoride	1,000	1	
Sulfuric acid	---	6	
Sulfur monochloride	1	0.25	
Sulfur pentafluoride	0.025	20	
Sulfuryl fluoride	5	10	
Systox, see Demeton®	---	5	
2,4,5T	---	10	
Tantalum	---	5	
<i>S</i> TEDP	---	0.2	
Teflon® decomposition products (maintain minimal air concentration)	---	0.1	
Tellurium	---	0.2	
Tellurium hexafluoride	0.02	0.05	
<i>S</i> TEPP	---	9	
<i>C</i> Terphenyls	1	4,170	
1,1,1,2-Tetrachloro-2,2-difluoroethane	500	4,170	
1,1,2,2-Tetrachloro-1,2-difluoroethane	500	35	
<i>S</i> 1,1,2,2-Tetrachloroethane	5	2	
Tetrachloroethylene, see Perchloroethylene	---	0.075 ^a	
Tetrachloromethane, see Carbon tetrachloride	---	590	
<i>S</i> Tetrachloronaphthalene	---	0.150	
<i>S</i> Tetraethyl lead (as Pb)	---	3	
Tetrahydrofuran	200	8	
<i>S</i> Tetramethyl lead (THL) (as Pb)	---	1.5	
<i>S</i> Tetramethyl succinonitrile	0.5	0.1	
Tetranitromethane	1	5	
<i>S</i> Tetryl (2,4,6-trinitrophenylmethylnitramine)	---	2	
<i>S</i> Thallium, soluble compounds (as Tl)	---	0.1	
Thiram	---	2	
Tin (inorganic compounds, except SnH ₄ and SnO ₂)	---	0.1	
(organic compounds)	---		

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	Tin oxide	Inert particulate	
	Titanium dioxide	Inert particulate	
	Toluene (toluol)	200	750
C	Toluene-2,4-diisocyanate	0.02	0.14
S	o-Toluidine	5	22
	Toxaphene, see Chlorinated camphene		
	Tributyl phosphate	---	5
	1,1,1-Trichloroethane, see Methyl chloroform		
S	1,1,2-Trichloroethane	10	45
	Trichloroethylene	100	535
	Trichloromethane, see Chloroform		
S	Trichloronaphthalene	---	5
	1,2,3-Trichloropropane	50	300
	1,1,2-Trichloro-1,2,2-trifluoroethane	1,000	7,600
	Triethylamine	25	100
	Trifluoromonobromomethane	1,000	6,100
	Trimethyl benzene	25	120
	2,4,6-Trinitrophenol, see Picric acid		
	2,4,6-Trinitrophenylmethylnitramine, see Tetryl		
S	Trinitrotoluene	---	1.5
	Triorthocresyl phosphate	---	0.1
	Triphenyl phosphate	---	3
	Tungsten and compounds (as W)		
	Insoluble	---	5
	Soluble	---	1
	Turpentine	100	560
	Uranium (natural)		
	soluble & insoluble compounds (as U)	---	0.2
C	Vanadium (V ₂ O ₅ dust)	---	0.5
	(V ₂ O ₅ fume)	---	0.1
	Vinyl benzene, see Styrene		
C	Vinyl chloride (see R 325.51401 et seq.)*		
	Vinyl cyanide, see Acrylonitrile		
	Vinyl toluene	100	480
	Warfarin	---	0.1
	Xylene (xylol)	100	435
S	Xylidine	5	25
	Yttrium	---	1
	Zinc chloride fume	---	1
	Zinc oxide fume	---	5
	Zirconium compounds (as Zr)	---	5

A See R 325.60154(2).
C See R 325.60154(2).
S See R 325.60154(2).

^aThe 1970 ACGIH standard for Tetraethyl lead is 0.100 mg/m³.

* Caution--these rules contain extensive requirements for exposure to these substances.
History: 2002 MR 1, Eff. Jan. 23, 2002.

R 325.60161 Maximum allowable concentrations for mineral dusts.

Rule 11. Table 7. Mineral dusts

Substance	MAC (mppcf)
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Silica	
Crystalline *	
Quartz	MAC = $\frac{250}{\% \text{ SiO}_2 + 5}$
Cristobalite	MAC same as quartz
Amorphous, including natural diatomaceous earth	20
Silicates (less than 1% crystalline silica)	
Asbestos, all types (see asbestos in construction R 325.51301 et seq.)	
Mica	20
Portland cement	50
Soapstone	20
Talc (non-asbestiform)	20
Talc (fibrous) (see asbestos in construction R 325.51301 et seq.)	
Tremolite (see asbestos in construction R 325.51301 et seq.)	
Graphite (natural)	15
Inert or nuisance particles **	50 of total dust less than 1% SiO ₂ (or 15 mg/m ³ , whichever is the smaller)

* The percentage of crystalline silica, SiO₂, in the formula is the amount determined from airborne samples.

** The following are some examples of inert or nuisance particulates when toxic impurities are not present; e.g. quartz less than 1%.

Alundum (Al ₂ O ₃)	Gypsum	Rouge
Calcium carbonate	Limestone	Silicon carbide
Cellulose	Magnesite	Starch
Corundum (Al ₂ O ₃)	Marble	Sucrose
Emery	Pentaerythritol	Tin oxide
Glycerine mist	Plaster of Paris	Titanium dioxide
Graphite (synthetic)	Portland cement	Vegetable oil mists (except castor, cashew nut, or similar irritant oils)

History: 2002 MR 1, Eff. Jan. 23, 2002.

OCCUPATIONAL HEALTH STANDARDS COMMISSION

PART 382. NONIONIZING RADIATION

R 325.60701 Electromagnetic radiation; scope of rule.

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Rule 1. (1) This rule applies to all radiations originating from radio stations, radar equipment, and other possible sources of electromagnetic radiation such as used for communication, radio navigation, and industrial and scientific purposes. This rule does not apply to the deliberate exposure of patients by, or under the direction of, practitioners of the healing arts.

(2) This rule replaces O.H. rule 2420.

History: 2002 MR 14, Eff. Aug. 7, 2002.

R 325.60702 Definitions.

Rule 2. As used in these rules:

(a) "Electromagnetic radiation" means that portion of the spectrum commonly defined as the radio frequency region, which for the purpose of these rules shall include the microwave frequency region.

(b) "Partial body irradiation" means when part of the body is exposed to the incident electromagnetic energy.

(c) "Radiation protection guide" means the radiation level that should not be exceeded without careful consideration of the reasons for doing so.

(d) "Symbol" means the overall design, shape, and coloring of the radio frequency (rf) radiation sign shown in Figure G-11.

(e) "Whole body irradiation" means the entire body is exposed to the incident electromagnetic energy or an exposure where the cross section of the body is smaller than the cross section of the incident radiation beam.

History: 2002 MR 14, Eff. Aug. 7, 2002.

R 325.60703 Radiation protection guide.

Rule 3. (1) For normal environmental conditions and for incident electromagnetic energy of frequencies from 10 MHz to 100 GHz, the radiation protection guide is 10 mW/cm.² (milliwatt per square centimeter) as averaged over any possible 0.1 hour period. This means the following:

Power density: 10 mW/cm.² for periods of 0.1 hour or more.

Energy density: 1 mW-hr./cm.² (milliwatt hour per square centimeter) during any 0.1 hour period.

This guide applies whether the radiation is continuous or intermittent.

(2) These formulated recommendations pertain to both whole body irradiation and partial body irradiation. Partial body irradiation must be included since it has been shown that some parts of the human body, such as eyes and testicles, may be harmed if exposed to incident radiation levels significantly in excess of the recommended levels.

History: 2002 MR 14, Eff. Aug. 7, 2002.

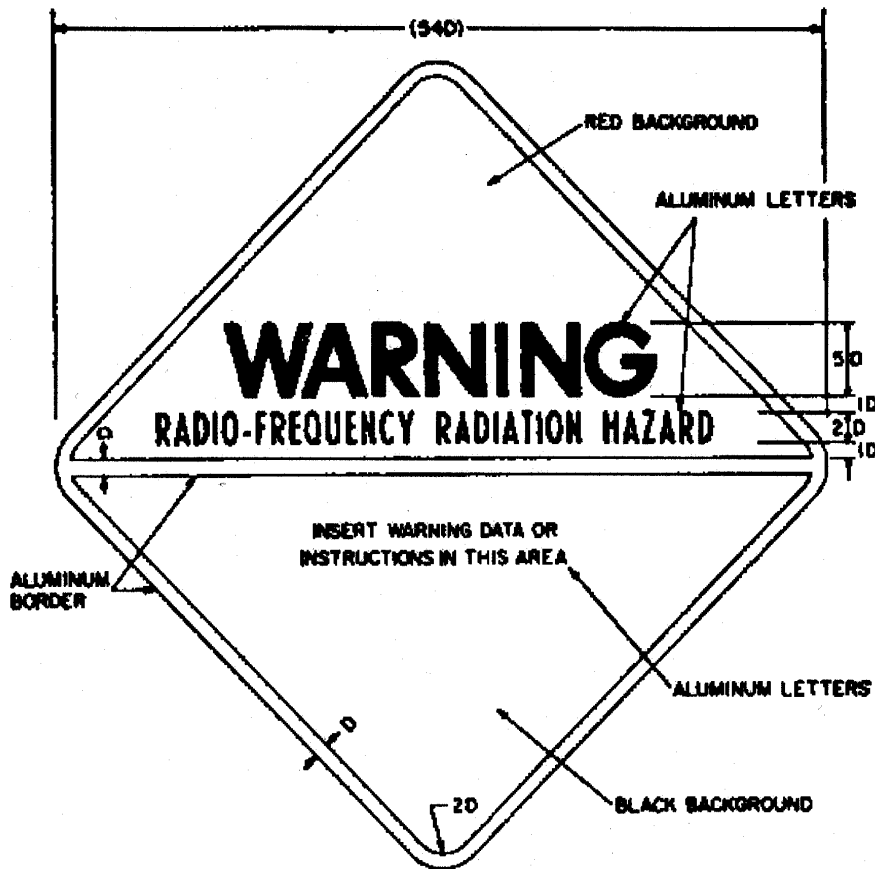
R 325.60704 Warning symbol.

Rule 4. (1) An employer shall ensure that the warning symbol for radio frequency radiation hazards consists of a red isosceles triangle above an inverted black isosceles triangle, separated and outlined by an aluminum color border. The words "Warning--Radio-Frequency Radiation Hazard" shall appear in the upper triangle. See Figure G-11.

(2) American national standard safety color code for marking physical hazards and the identification of certain equipment, Z53.1-1953, shall be used for color specification. All lettering and the border shall be of aluminum color. ANSI Z53.1-1953 is adopted by reference in this rule. Printed copies of ANSI Z53.1-1953 are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, telephone number 1-800-854-7179, website: WWW.GLOBAL.HIS.COM, at a cost as of the time of adoption of these rules of \$25.00 or is available for inspection at the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan 48909.

(3) The inclusion and choice of warning information or precautionary instructions is at the discretion of the user. If information is included, then the information shall appear in the lower triangle of the warning symbol.

(4) Figure G-11 reads as follows:



1. Place handling and mounting instructions on reverse side.
2. D = Scaling unit.
3. Lettering: Ratio of letter height to thickness of letter lines.
Upper triangle : 5 to 1 Large
6 to 1 Medium
Lower triangle 4 to 1 Small
6 to 1 Medium
4. Symbol is square, triangles are right-angle isoseles.

Figure G-11

Radio-Frequency Radiation Hazard Warning Symbol

History: 2002 MR 14, Eff. Aug. 7, 2002.

AGRICULTURAL FIELD SANITATION

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R 325.61751
Source: 1997 AACS.

R 325.61752
Source: 1997 AACS.

R 325.61753
Source: 1997 AACS.

R 325.61754
Source: 1997 AACS.

R 325.61755
Source: 1997 AACS.

R 325.61756
Source: 1997 AACS.

R 325.61757
Source: 1997 AACS.

OH STANDARD RULE 6610 - MEDICAL SERVICES AND FIRST AID

R 325.66201 Rescission of OH rule 6610.

Rule 1. OH rule 6610, which was incorporated by reference pursuant to section 14 of 1974 PA 154, MCL 408.1014, is rescinded.

History: 2002 MR 4, Eff. Mar 7, 2002.

**UNDERGROUND CONSTRUCTION, CAISSONS, COFFERDAMS,
AND COMPRESSED AIR**

R 325.62991
Source: 1998-2000 AACS.

R 325.62992
Source: 1998-2000 AACS.

R 325.62993
Source: 1998-2000 AACS.

R 325.62994
Source: 1998-2000 AACS.

R 325.62995
Source: 1995 AACS.

R 325.62996
Source: 1998-2000 AACS.

PERMIT-REQUIRED CONFINED SPACES

R 325.63001
Source: 1998-2000 AACS.

R 325.63002
Source: 1998-2000 AACS.

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R 325.63049
Source: 1998-2000 AACS.

BLOODBORNE INFECTIOUS DISEASES

R 325.70001
Source: 2001 AACS.

R 325.70002
Source: 2001 AACS.

R 325.70003
Source: 1993 AACS.

R 325.70004
Source: 2001 AACS.

R 325.70005
Source: 1996 AACS.

R 325.70006
Source: 1993 AACS.

R 325.70007
Source: 1996 AACS.

R 325.70008
Source: 1996 AACS.

R 325.70009
Source: 1996 AACS.

R 325.70010
Source: 1993 AACS.

R 325.70011
Source: 1993 AACS.

R 325.70012
Source: 1996 AACS.

R 325.70013
Source: 1996 AACS.

R 325.70014
Source: 1993 AACS.

R 325.70015
Source: 2001 AACS.

R 325.70016
Source: 1996 AACS.

R 325.70017
Source: 1996 AACS.

R 325.70018

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Source: 1996 AACS.

HAZARDOUS WORK IN LABORATORIES

R 325.70101

Source: 1992 AACS.

R 325.70102

Source: 1992 AACS.

R 325.70103

Source: 1992 AACS.

R 325.70104

Source: 1992 AACS.

R 325.70105

Source: 1992 AACS.

R 325.70106

Source: 1992 AACS.

R 325.70107

Source: 1992 AACS.

R 325.70108

Source: 1992 AACS.

R 325.70109

Source: 1992 AACS.

R 325.70110

Source: 1992 AACS.

R 325.70111

Source: 1992 AACS.

R 325.70112

Source: 1992 AACS.

R 325.70113

Source: 1992 AACS.

R 325.70114

Source: 1992 AACS.

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

DIRECTOR'S OFFICE

OCCUPATIONAL HEALTH STANDARDS

R 325.70251

Source: 2001 AACS.

HAZARD COMMUNICATION

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R 325.77001

Source: 1995 AACS.

R 325.77002

Source: 1995 AACS.

R 325.77003

Source: 1995 AACS.

BENZENE

R 325.77101 Scope.

Rule 1. (1) These rules apply to all occupational exposures to benzene, chemical abstracts service registry no. 71-43-2, except as provided in subrules (2) and (3) of this rule.

(2) These rules do not apply to any of the following:

(a) The storage, transportation, distribution, dispensing, sale, or use of gasoline, motor fuels, or other fuels that contain benzene after its final discharge from bulk wholesale storage facilities, except that operations which dispense gasoline or motor fuels for more than 4 hours per day in an indoor location are covered by these rules.

(b) Loading and unloading operations at bulk wholesale storage facilities which use vapor control systems for all loading and unloading operations. However, such operations are subject to the provisions of R 325.77107 and R 325.77109(9) and the hazard communication provisions of sections 14a to 14m of 1974 PA 154, MCL 408.1014a to 408.1014m.

(c) The storage, transportation, distribution, or sale of benzene or liquid mixtures that contain more than 0.1% benzene in intact containers or in transportation pipelines while sealed in a manner to contain benzene vapors or liquid. However, such storage, transportation, distribution, or sale is subject to the provisions of R 325.77107 and R 325.77109(9) and the hazard communication provisions of sections 14a to 14m 1974 PA 154, MCL 408.1014a to 408.1014m.

(d) Containers and pipelines that carry mixtures which are less than 0.1% benzene.

(e) Natural gas-processing plants that process gas which contains less than 0.1% benzene.

(f) Work operations where the only exposure to benzene is from liquid mixtures that contain 0.5% or less of benzene, by volume, or the vapors released from the liquids until September 12, 1988; work operations where the only exposure to benzene is from liquid mixtures that contain 0.3% or less of benzene, by volume, or the vapors released from the liquids from September 12, 1988, to September 12, 1989; and work operations where the only exposure to benzene is from liquid mixtures that contain 0.1% or less of benzene, by volume, or the vapors released from the liquids after September 12, 1989; except that tire-building machine operators who use solvents which contain more than 0.1% benzene are subject to the provisions of R 325.77109.

(g) Oil and gas drilling, production, and servicing operations.

(h) Coke oven batteries.

(3) Cleaning and repair operations of barges and tankers that have contained benzene are excluded from the provisions of R 325.77106, R 325.77105(1) to (4), and R 325.77105(6). Engineering and work practice controls shall be used to keep exposures below 10 ppm, unless it is proven to be not feasible.

(4) These rules replace those portions of O.H. rules 2101(5), 2101(8), and 2103 that pertain to benzene for those industries covered by subrule (1) of this rule.

History: 1989 MR 7, Eff. Aug. 10, 1989; 2002 MR 1, Eff. Jan. 23, 2002.

R 325.77102

Source: 2001 AACS.

R 325.77103

Source: 1989 AACS.

R 325.77104

Source: 1989 AACS.

R 325.77105

Source: 2001 AACS.

R 325.77106

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Source: 1989 AACS.

R 325.77107

Source: 2001 AACS.

R 325.77108

Source: 2001 AACS.

R 325.77109

Source: 2001 AACS.

R 325.77110

Source: 2001 AACS.

R 325.77111

Source: 2001 AACS.

R 325.77113

Source: 2001 AACS.

R 325.77114

Source: 2001 AACS.

R 325.77115

Source: 2001 AACS.